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JANUARY, 1915

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JOURNAL

OF THE

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EXAMPLES OF TIBETAN SEALS

BY E. H. WALSH

THE subject of Tibetan seals has already been discussed in this Journal in connexion with the seal of the Dalai Lama, the reading of which was first given by Dr. Bushell in JRAS. 1906, p. 476, referring to the illustration of the seal in Colonel Waddell's Lhasa and its Mysteries, in his review of that book. But he gave no examples of the character.

The Rev. Dr. A. H. Francke in his "Note on the Dalai Lama's Seal and the Tibeto - Mongolian Character" (JRAS. 1910, p. 1205) has deciphered the inscription on the seal, and has also given the alphabet of the Tibetan seal character which he obtained from a Tibetan wood-print discovered in Ladakh. He also gave the inscription on the seal of the rNam-rgyal dynasty of Western Tibet. In the present article I give some further examples of Tibetan seals in the above character, and also of others in which the inscriptions are in Indian character, or which merely bear an ornamental design.

Tibetan seals generally bear an inscription in the above character, which is known as *Hor-yig*, viz. "Mongolian letters". It is, as Dr. Frankle has shown, an archaic square form of the Tibetan character with the letters arranged one below the other in vertical columns, and was invented by the Saskya hierarch Kun dga rgyal mtshan, A.D. 1182-1252, who presented it to the Mongolians. They were to use it for their newly started literature. The characters were, however, too clumsy for general use, and the Mongolians preferred a form of the Uigur alphabet which was founded on the Syriac characters of the Nationians."

Dr. Francke gave a corrected copy of the Dalai Lama's seal, with certain letters amended according to the Ladakh alphabet, from two reproductions of the seal which formed illustrations, the one to Waddell's Lhasa and its Mysteries, p. 448, and the other to a paper of mine on the Coinage of Tibet, in both of which certain letters which had been indistinct in the original impression of the seal had not been correctly reproduced. As I have already pointed out, the illustration of the seal which I gave in my paper referred to was copied from the facsimile of the seal given in Landon's Lhasa; as an impression of the seal which I then had was very indistinct, which is frequently the case with Tibetan seals. and as the purpose of the reference to the seal in that paper was not concerned with the meaning of the characters on the seal or their precise form, I had not thought it necessary to compare it with other illustrations

I have, however, since obtained an absolutely clear impression of the seal, which was given me by the Dalai Lama himself on a copy of his portrait which he gave me when he was in Darjeeling. A drawing of it will be found in Fig. 1 of the Plate facing p. 15. The characters are as shown by Dr. Francke in his corrected drawing of the seal, with the exception of the bottom word of the middle column, which was not clear on the previously published

¹ MASB., vol. H, p. 16. ² JRAS. January, 1911, p. 207.

reading of the scal as = ru. This word is really = rtsu "original authoritative." as was afterwards noted by Colonel Waddell (JASB. 1911, p. 204), and means the "official" seal. The inscription on the seal is therefore (snake-ornament) Tului blamai risa themka ryyal, namely, "The royal official seal of the Dalai Lama." He has also his private seal, which is a different one.

The form of the letter ten differs from the form of that letter given in the Ledakh block-print, alphabet.

I am unable to agree with Colonel Waddell, who reads the last character as was and the last word as rgyal-wa, and translates "The original seal of the Dalai Lams, the Jina". I agree with Dr. Francke (JRAS. 1911, p. 529) that the word rayal from its position must refer to thamka, "the seal," and not to the Dalai Lama. I may also say that this is the sense in which the Tibetan Minister read the seal, and also Dr. Bushell, who reads it "The royal seal of the Dalai Lama", as the word rter was illegible and had therefore to be omitted. The last character on the seal, - which Colonel Waddell reads as use, is merely to fill up the line. Such stops are common in Tibetan seals. Examples will be found of this identical form of stop to fill up a column in both the seals of the Prime Minister of which I give illustrations further on, namely, at the bottom of the fourth column of the Prime Minister's first seal and at the bottom of the second and fifth columns of the Prime Minister's second seal, at the bottom of the right-hand column of the seal of the two Jong-pons of Gyantse, and at the bottom of the left-hand column of the recent seal of the Joint Tibetan Trade Agent at Gyantse, in all of which places, as will be seen from the reading of those seals, the word wa would be quite meaningless. Also in an earlier form of the

Dalai Lama's seal, which Dr. Francke has published in JRAS. 1912, p. 747, this character does not appear at the end of the seal, as it would do if it were part of the inscription.

With regard to the initial character which Colonel Waddell reads as Om (JRAS. 1911, p. 822), I would remark that, whistever the origin of the initial character which is placed at the commencement of all documents and which is commonly known in Tibetan as mgo-shad ("head mark" or "initial mark") may be, it is not, as a matter of practice, read at all. I have never heard it read as Om, and in an explanation of the meaning of the Dalai Lama's seal, word by word, given me by one of the Tibetan ministers of his own accord when I was inquiring about the matter, there is no reference to this sign, as would be expected, if it is considered to be Om and to be part of the inscription, but the explanation as written by him commences with the word Talai.

The inscription on the earlier form of the seal, published by Dr. Francke (JRAS. 1912, p. 747), is Dorje 'achang: Talai blama-yi tham-ku ryyal. This seal appears on a letter of the Dalai Lama which Mr. F. Becker Shawe, a Moravian missionary of Leh, found preserved in the archives of one of the old noble families of Ladakh, and photographed between the years 1891 and 1895. It would be interesting to know what is the date of the letter. But, owing to the Tibetan system of sixty-year cycles, the date cannot be ascertained from the letter itself, which will only give the year within the cycle. It will therefore have to be obtained from external sources.

Besides the Dalai Lama's official seal he has also a private seal, which is given in Fig. 3 of the Plate. This seal was impressed in sealing-wax on the outside of a letter, and therefore differs from the other seals illustrated, as the design is cut into the seal, and is not in relief, as in the case of the other seals, which are

sealed in ink. An enlargement of the design on the seal is given below.



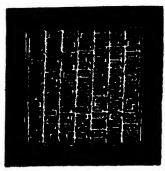
The characters on this seal, though resembling the Hor-yig in general appearance as being of square form and written in vertical columns, are quite different, and appear to be merely ornamental and without meaning.

As the three dots outside the central enclosure indicate the top of the seal, the characters therefore appear to be quite meaningless. If, however, the seal be read the other way up, the bottom group of characters in the third column might be rgyan, namely "ornament", though they would be a form of square character different to the Hor-yig, which is used on all the other examples of scals. But, even then, I am unable to suggest any meaning for the other characters; and the two outside columns are somewhat rounded in form and appear to be only ornamental designs. I think, however, that the characters must have some significance, and may possibly be imitations of characters or symbols on old Mongolian scals.

The seals of the Lön-Chhen or Prime Minister of Tibet are an interesting example of the seal character.

The impression of the first seal was given me by the Prime Minister, Srid-dain Lön-chhen Shattra, when he was with the Dalai Lama in Darjeeling in 1911, and the impression of the second seal this year in Delhi. The

inscription on both the seals is mainly the same, though somewhat shorter in the second seal, seven words being omitted, and the character is consequently larger. I give below a facsimile of the first seal.



This seal consists of seven columns; there are five words in each of the first six columns and four in the seventh, the space remaining in the bottom of any column being filled in with meaningless signs

The inscription, written in the printed character, is as follows:---

34	95	2 5	5 4	æ =	2 7	2 8
244	3=	44	ã n	3 ×	भे भ	मदे
454	X	व्र	य र	व श्वेष	र मे	£ :
1	465	四角	5 4	at 29	# * 5	4 2 4
3 4 4 4 6 4 4 7 6	594	37	na	3	2 4 5	

The vertical columns of the inscription read as follows' --

- 1. (Snake-ornament) rgyal dhang mchhog gu bhan
- 2. lung. gis. ngo. mtshar dgah.
- 3. bryya phrag ldan pai kun.

^{*} In this article 4 had been transliterated as \$, as in Rai Sarat Chandra. Dan's Dictionary, except where it forms the vowels s, s, s, and c. It has, however, so apprinted seems and should secretally be transliterated by a; 5,* has been transliterated as ng, and \$,* as si.

- 4. khyub. chhoe ldan rgyal pai.
- 5. Chhab erid hphrin las kyi.
- 6. bkra shis dge mtshan 'abar.
- 7. bai bde skyid hphel.

The translation is as follows:--

"By the precepts of the orders of the most powerful king may the good luck and prosperity of the affairs of the kingdom of the all-embracing religious king blaze forth into a hundred thousand pleasures (and) their felicity increase."

The spaces at the bottom of the columns are filled up with the following apparently meaningless characters:—

Second column					
Third column			٠		53
Fourth column	•	٠		•	
Fifth column.					
Sixth column	•	•		•	
Seventh column			٠	•	吗

The second seal of the Prime Minister is given below.



There are three words in the first column and four in each of the others. The words dgah brgya hphrag ldan pai in the second and third columns of the first seal are omitted, and also the words bkra-skis at the top of the sixth column of the first seal. The inscription written in the printed character is as follows:—

•	7	₹	& 4		3	ng
5 4	यग्रे	₽\$ ₹	थ्र	बैद	59	यदे
3 4 5	35	35	5 4	क य से द य से द	म के प्	वैर
मळॅ 9	9 4	59	ñà	4	445	4 4

The vertical columns read as follows:--

- 1. (Snake-ornament) rgyal dbang mchhog
- 2. gi bkai lung gis
- 3. ngo mishar kun khyab
- 4. chhos ldan rgyal poi
- 5. chhab srid hphrin las
- 6. kyi dge mtshan hbar
- 7. pai bde skyid hphel.

The space at the bottom of the first line is filled up with a character and of the second and fifth lines with a plain stop, like the one at the end of the seal of the Dalai Lama, the third with a character which is rather indistinctly stamped, and the fourth and sixth with a character.

Illustrations of other seals are given in the Plate.

Tibetan official seals are generally square; all the more important ones, which are in the Hor-yig seal character, are so, though less important official seals and private seals are round and much smaller. Examples of these are the private seal of the Dalai Lama already mentioned, and those of the Private Secretary of the Taski Lama and of

the Treasurer of the Tashi Lama (Figs. 3, 4, and 5 of the Plate).

The seals of the three great monasteries, Sera, Depung, and Gahdan, are also round.

Some Tibetan seals are always stamped in red and others in black. The official seals of the Dalai Lama (Fig. 1), of the Tashi Lama (Fig. 2), and of the Kyab-ying, via the Prime Minister of the Tashi Lama (Fig. 10), and the small seals (Figs. 3, 4, and 5) are always stamped in red, and those of the Council (Fig. 6), the National Assembly (Fig. 7), the Kalon Lama Minister (Fig. 8), the Jongpöns of Phari (Fig. 9), and of the Abbot of Gyantse Monastery, the Tibetan Trade Agent, and the Jong-pöns at Gyantse, illustrated below, and also those of the three great monasteries are stamped in black.

The seal of the Tibetan Council of Ministers (Fig. 6) bears the usual snake-ornament and the words sde skyid, "happiness, felicity," in the centre column. The two side columns are ornamental square characters. This seal was given to the Council by the seventh Dalai Lama (A.D. 1708 to 1758) when the Council was constituted, and the motto was given as showing that the Council was to secure the happiness of the people. The Council, which is known as the Kasha (ग्राव नामा), from the name of the Council House in Lhasa where it meets, consists of the Shapes (328.25') or Ministers, one of whom is always a Lama. The Prime Minister is known as the Lon-chben, whose seals have been already described, and the Lama Minister as the Ka-lön Lama (नगुन ज़िन्ह न), whose seal is shown in Fig. 8. The seal of the Council was one of the seals affixed to the Tibetan Treaty of 1904.

The seal of the National Committee, or Tshong-du Düpa (AR-A5-55'R. Tshogs-hdu dud-pa), is shown in Fig. 7 and contains two columns. The first column is the snake-ornament and the word ryyal, and the second column ser

sa. rGyal zer sa may mean either "the place known as victorious" (or "royal"), or "the place of victorious (or 'royal') light", or "the place of victorious (or 'royal') speech".

In the word \supseteq zer, the letter \supseteq z, is different from the form in the Ladakh alphabet, which is \supseteq The form of the letter \subseteq e, also differs from the Ladakh alphabet, but is the same as that which occurs in the older seal of the Dalai Lama, JRAS. 1912, p. 747.

The characters in the right-hand column are distinct on the seal; those in the left-hand column are rather blurred, but they are, I think, as shown.

The seal of the Lama Minister is shown in Fig. 8. In the centre column are the words bde legs, "blessing." The two outer columns are square characters, which appear not to represent letters but to be merely ornamental. These characters are as follows:—

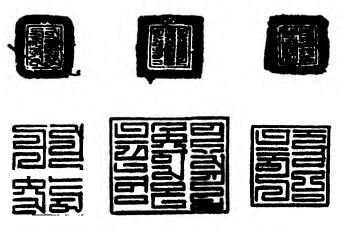


The form of the letter e in this seal differs from that in the Ladakh alphabet.

The official seal of the Phari Jong-poins is shown in Fig. 9. The Jong-poins () are District Officers in charge of a district, at the head-quarters of which is a Jong, or fort. The seal consists of three columns. The inscription is as follows:—



Three further examples of Tibetan scals are given below. These scals are stamped in black.



Seal of the Abbot of the Gyantse Monastery.

(Modern) Seal of the Tibetan Joint Trade Agent at Gyantse.

Seal of the Jongpons of Gyantse.

The first is the official seal of the Abbot of the dPal-hKhor-Chhos-sDe Monastery at Gyantse. The inscription is: first column, dpal-clihos; second column, spyi dag. The inscription is abbreviated for dPal-hKhor-Chhos-sDe spyi-khyab dag-po, "the pure Head Official of the dPal-hKhor-Chhos-sDe Monastery." The Abbot also has a private seal, which, like other private seals, is a small round seal.

The second is the seal of the Tibetan Joint Trade Agent at Gyantee, and is therefore quite modern.

The inscription is: first column (snake-ornament), Phun, and a character to fill up the column; second column, Tshoys and a character to fill up the column; third column, bde skyid. The whole inscription being, Phun-Tshoys bde skyid, "sublime blessing" or "the blessing of Heaven".

The third seal is the official seal of the Jong-pons of Gyantse. The inscription is: first column (snake-ornament), rgyal; second column, rdzony. It is literally "the Royal Fort", but is intended for rGyal-tse rdzony, "Gyantse Fort" (i.e. "Royal Peak Fort").

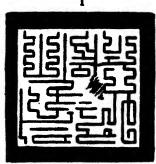
The official seal of the Khyab-ying (\$7.5% "the Protector of the Spheres"), who is the Prime Minister of the Tashi Lama, is shown in Fig 10 The inscription in this seal is as follows --

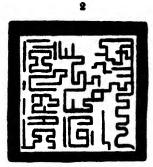


I am unable to find any meaning for the design on thiseal. The bottom character of the left-hand column might be ku, but none of the others bears any resemblance to any letter. I have inquired from the Khyab-ying but have not yet received his reply

As I have already suggested, the apparently meaning less characters on Tibetan seals may be imitations of characters or symbols from old Mongolian seals. Four examples of such seals are illustrated in Yule's Tracels of Marco Polo. One of these is on a photograph of a letter of Arghun Khan sent by him to Philip the Fair of France in 1289 a.D., another on a letter sent by Oljaitu to Philip

the Fair in 1305; the other two are on a photograph of a bank-note of the Ming Dynasty, which carried on the paper currency of the Mongola. I give a tracing of the two latter seals below.





Two Seals from a Bank-note of the Ming Dynasty.

The character at the bottom of the left-hand column of the lower seal on the bank-note, which is shown as Fig. 2, is the same as the character at the bottom of the third column of the first seal of the Prime Minister, and the character at the top of the left-hand column of the lower seal on the bank-note (Fig. 2) is the same as the penultimate character in the right-hand column of the seal of the Jong-pöns of Gyantse. None of the other characters correspond with those on the Tibetan seals, but there is a general sort of resemblance between them and some of the characters on the seal of the Khyab-ying.

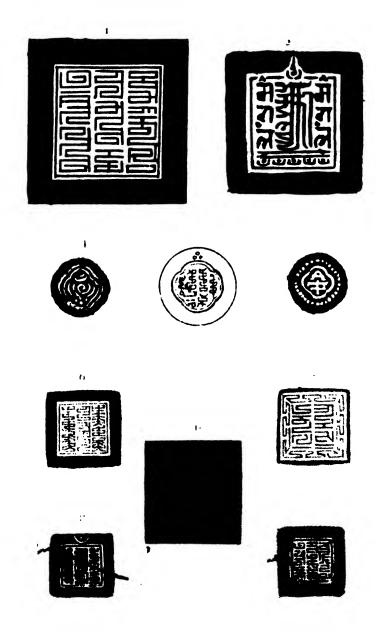
Besides seals in the Hor-yig seal character some Tibetan seals have the inscription in Tibetan U-chan characters. The seals of the Sera and Gahdan Monasteries are examples. The seal of the Depung Monastery has its inscription in the Hor-yig character.

¹ Travels of Marco Polo, translated by Colonel Sir Henry Yule, edited by Henri Cordier, vol. ii, p. 474, 1903. The letter of Arghun Khan bears three impressions of his seal and that of Oljaitu bears five impressions of his seal. The two seals are different.

² Op. cit., vol. i, p. 426.

Another seal which bears no inscription but only a design is that of the Treasurer (37° MK3°) of the Tashi Lama, which is shown in Fig. 5. The design is an emblem of prosperity.





the illustration of the Treaty which is given by Sir F. Younghusband in India and Tibet, p. 306. The impressions are, however, indistinct for the purpose of reading the inscriptions. Mr. B. C. Gould, Political Officer in Sikkim, has kindly had these seals photographed for me in their full size.

The inscription on the seal of the Depung Monastery is clear: h.Bras-woung.

The inscriptions on the other seals are, however, too indistinct to be read. That on the Sera seal appears to be Se (at the top), ra (on the left side), illegible (on the right side), ckhes (at the bottom).

The inscription on the Gahdan seal appears to be dGah at the top; illegible, probably idan, on the right side; nho on the left side, and bra(ng) at the bottom, viz. dGahldan pho-brang, the Gabdan Palace.

Although the inscriptions are indistinct. I give the seals below as examples of this class of seal.



EMIPTION OF THE PLATE-

- 1 Official seal of the Delai Lama.
- 2 Official seal of the Marki Lema.

- Orients and of the Helpin Lame.
 Private and of the Helpin Lame.
 Seal of the Sequency of the Tashi Lame.
 Private seal of the Khyab-ying, which is affixed to letique against by the Transmit of the Tashi Lame.
 Seal of the Thinki Consell of Ministers.
 Beal of the Matient Consell of Ministers.

- R. Soul of the Legis Military of the Thotas Govern 9. Soul of the Legy-plan of Phone.
- 10. Official real of the Khrabysian, the chief Minister of the Tashi Laure.

THE INDO-ARYAN MASALS IN GUJRATI

By R. L. TURNER

1. 1. The following discussion of the treatment of the Indo-Āryan nasals in Gujrāti is based on materials which I have been collecting with a view to a more complete account of the sound changes of the language, but of which circumstances have delayed the publication.

Much that is contained in the older comparative grammars of the modern Indo-Aryan languages is of little value, as at the time of their writing the new ideas of the Junggrammatiker had either not been published or at least had not been appreciated by the writers. The inviolability of sound laws is still a golden principle for a student of linguistic change to hold to, and if he is forced to confess to a violation, he must frankly recognize the fact, investigate it fully, and, if possible, explain it. Any modifications of the original theory have not so much struck at its foundations as multiplied the conditions under which we may expect variation. The importance of this has not, unfortunately, always been realized by more recent writers on the sound changes of the modern Indian languages.1 They have been too often content with saying that such and such a sound develops in two or more ways in the same language without attempting to specify the conditions of variation. To do something towards such a specification with regard to the nasals, and

¹ Since writing this article I have had the privilege of reading M. J. Bloch's excellent book La formation de la langue marathe, which all students of Indian languages in particular and of comparative philology in general will welcome as one of the first colentific attempts to explain the phonetic history of a modern ladian language.

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particularly m, in Gujrātī I have attempted in the following pages.

1. 2. Abbreviations

A. Apabhramás.

fr. derived from.

G. Gujrati.

H. Hindi.

HD. Hémacandra's Désinamamālā.

IA. Indo-Āryan.

Idg. Indogermanic.

L. Lexicographers.

M. Marathi.

Mod. Modern.

O. Old.

P. Panjabi.

PI. Primitive Indian (Urindisch).

s. having the same meaning.

Ś. Śaurasenl.

wel. with compensatory lengthening.

indicates a conjectural form.

Where the language with which the Gujrati word is compared is not specified, Skt. (Sanskrit) is to be understood.

- 1. 3. There is good reason to believe that Gujrāti is descended from a dialect of Śaurasēni (a question I hope to discuss at greater length afterwards)¹; possibly the Apabhramáa of Hēmacandra forms a link in the chain. But this point still needs investigation (see Sir G. Grierson's notes in the Linguistic Survey of Gujrātī).²
- 1. 4. Primitive Indian as represented by the language of the Veda possessed the following nasals: $\hat{n}, \hat{n}, n, n, m, m, m$. Of these \hat{n} and \hat{n} are never found independently, but only in connexion with their corresponding stops: n, due originally to the presence of an s- or r-sound, is found neither initially nor finally, but is otherwise independent; n and m are quite independent and are found in all positions; it is possible that final -m was replaced by -m.

¹ Dr. Barnett's statement in Antiquities of India, p. 34, that G. is descended from Avayti seems without sufficient foundation. The Avanti dialect of S. has left so few monuments that it is impossible to draw a safe conclusion.

A difficulty in the way of a close connexton is the different treatment of m. In A. every m- tended to become f., e.g. nafa, capter from admandance; G. nam camer (see 3.3 ff.). The chief point of connection is the close resemblance of verbal forms (cf. 5.1).

although the modern Brahman pronunciation gives -m. The exact value of m, found only before sibilants and perhaps finally, is undetermined. That it was something more than a mere nasality of the preceding vowel seems to be shown by the fact that when it becomes such the vowel is lengthened wel. (see 6.417) and that the grammarians distinguished between it and the sound they called anunāsika, which seems to have been a simple nasality of the accompanying vowel. The modern pronunciation given to m seems to me to be that of a nasalized labial spirant - \tilde{v} - or - \tilde{w} -, e.g. I have heard simbah as sibhah from a Maratha scholar.

1. 5. Gujrāti possesses the following nasals: n, n, n, m. and the nasalization of vowels represented by the mark over the vowel. Of these n is found finally as a current pronunciation of final -ng in pausa and before consonants (see 6. 411), and sometimes I think it appears between a nasalized vowel and a guttural, particularly if the vowel is short, e.g. agūtho or angūtho; otherwise it has no independent existence. n is formed with the tip of the tongue turned back and striking the palate a trifle further back than for f, etc.; the mouth passage does not seem to me to be completely closed during the whole formation of the sound, and it is perhaps a cerebral nasalized spirant rather than a nasal proper; it often imparts a certain amount of nasality to the preceding vowel, in this way resembling the history of the group ama > ada > dva (see 3, 32). It occurs in all positions except initially. n is formed by contact between the tip of the tongue and the roots and inside edge of the upper front teeth; it occurs in all positions. m is formed by closure of the lips and is like English m except that the lips are held rather more tautly; it is unrestricted in position. Any vowelmay be nasalized, and the nasalization, generally equivalent in strength to Jespersen's 82, is coincident with the duration of the vowel.

2. Initial n-, m-

- 2. 1. n-, Ś. n- becomes (Mod. IA. n-) G. n-: nār f. "woman": nārī s.; navò "new": navaḥ s.; nāthò "having fled": naṣṭaḥ "destroyed"; nām n. "name": nāman- n. s.; nās m. "destruction": nāšaḥ s.; na "not": na s.; naļ m. "pipe": nalaḥ "reed"; nisāso m. "groan": niḥśvāsaḥ s.; nāmvā "to pour": nāmayati "to bend": nīm m. "Azadirachta Indica": nimbaḥ s.
- 2. 2. m-, Ś. m- (Mod. IA. m-) remains: māg m. "road": mārguḥ s.; maļ m. "dirt": malum s.; mūļ n. "root": mūlum s.; mākh f. "fly": makṣā s.; māthā n. "head": mastakam s; mīṭhō "sweet": mṛṣṭaḥ s.; mārvā "to strike": mārayati "to kill"; mājvā "to clean": mārjati s.; mātō "mad": mattaḥ "intoxicated".

3. Intervocalic -n-, -n-, -m-

- 3.1. -n-, 8. -n- becomes (M. n. H. n.) G. -n-: khan n. "moment": kṣaṇam s.; cogṇo "fourfold": caturguṇah s.; ghan m. "stink": ghraṇah s.; chan n. "cowdung": chagaṇam s.; sunru "to hear": śṛṇōti s.; ökhaṇvu "to pound": avakṣaṇōti s.; kaṇas n. "ear of corn": kaṇiśaḥ s.; gharni f. "mistress of the house" fr. "garhiṇikā: grhiṇi s.
- 3. 2. -n-, S. -n- (M. n, H. n) becomes G. -n- (cf. G.M.P. -l- fr. -l-: H. -l-): māṇas m. "man": mānusah s.; tāṇvū "to stretch"; tāṇayati s.; dhanī m. "master": dhanīkah "rich"; hhe "base, low"; hīṇah s.; ghanō "many": ghanāh "thick"; aṇō "not quite filled": unāh "less"; vin "without": vinā s.; pāṇī n. "water": pāṇīyam s.; vakhān n. "story": vyākhyānam s.: āgṇā (or āṇṇā) n. "courtyard": aṅgṇamam s.
 - 3. 3. Up to the present it does not seem to have been noticed that in Gujráti we have a donoic treatment of PI, intervocalic -m- regumted by definite conditions. For example, Sir G. Grierson in his article in the ZDMG.

vol. l, p. 16, vaguely says: "The Ap. rule (H.C. iv, 397) under which a medial m is optionally changed to a nasalised v, holds strongly in all the IAV (Indo-aryan vernaculars)." He then puts side by side the forms nam and nav fr. nama, but makes no attempt to specify the conditions.

Actually Gujrāti is one of the few languages, including Singhalese and the North-West dialects (see Grierson, Piśūci Languages, p. 118), which have not uniformly changed -m- to -v-. The conditions appear to be as follows. The treatment of -m- depends on the position of the accent, i.e. the later penultimate stress of the type

3. 31. After the accent -m- remains.

3. 311. Immediately: jamen "to eat", jaman n. "meal". H. jaunar m. "feast" fr. "jamanukāra"jannār: jamati "to eat": camar m. or f. "flyflap":
cāmaruh s. H. cāwar m. s.: camarah s.; ugāmen "to
lift out", H. ugāna "to raise" fr. "ugāuma: "udgāmayati, Skt. udgamayati "to cause to come up"; namvā
"to bend" intrans., H. naunā s. fr. "naunā: namati s.;
nāmvā "to pour", H. nānā "to cause to bend" fr.
"nāwnā: nāmayati s.; kamaļ m. "lotus", H. kāwal m.
s.: kamalah s.; bhamrō m. "bee", H. bhaūrā m. s.:
bhramarah s.; sāmfō "dark", H. stwlā "dark-complexioned": syāmalah s.; nām n. "name", H. nāw m. s.:
nāman-n. s.; gām m. "villege", H. gāw m. s.: grāmah
s.; visāmō m. "rest", M. visāwā s.; visāmah s.; sāmē. "H. sāw s.: eēmā s.; tam m. "darknem", H.

¹ M. Bloch, op. cit., p. 141, wrongly says that -m- changes to -b- in all languages except Singhalese and North-West dislects.

The same writer, op. cit., pp. 50 ff., ignores any influence of stress account in the development of the Mod. IA. languages. To do this in the case of G, at least, account to me impossible. There is little or no atress now, but its effects are evident. It is worth noting that in many words it must have had a different position from any account postulated to explain Markthi changes.

tāwālā m. "darkness before the eyes, fainting": tamasn. "darkness"; damvū "to tire": damayati "to subdue";
vām m. or f. "fathom": vyāmah s.; vimaļ "clean":
vimalah s.; samo m. "time": samayah s. (if it were
a loan-word like H. samai, samai, we should expect
*samē); dhaman f. "bellows": dhamani "pipe"; lom
m. "hair of the body": lomam s.; bhām f. "angry
woman": RV. bhāmah "anger"; dhimo "steady":
dhimant-"thoughtful".

- 3. 312. Mediately: pāemo "fifth", H. pāewā s. fr. *paācamukuḥ: paācamuḥ s.; sātmo "seventh", H. sātwā s.: saptamaḥ s.; dādam m. "pomegranate": dādimaḥ s.; nom f. "ninth day ": navamī f. "ninth".
- 3. 32. Before the accent -m, \dot{S} , -m- becomes the nasalized labial spirant \hat{v} : this -v- falls together with -v- fr. P1. -v-, -p-, -b-, and the nasalization is transferred to the preceding vowel.
- 3. 321. kavaro "unmarried". H. kavar s.: kumarah "lad"; sõpva "to consign", H. saapna fr. *sirappa:: sumarpayati s.: sõy m. "disguise", H. saag m. "imitation": *samangah "having the same form"; sõdha m. pl. "a particular fragrant drug". H. saadha "sweet-smelling": sumagandhah "a particular perfume made of similar ingredients"; sõgho "cheap". M. saray s.: sanaryhah s. põdua "to crush": pramardati s.: sõsro "passing through fr. *samapasarakah: apasarati "to pass away out" (?). dbödo m. "hair dressed in the shape of a mango fr. *amramakutakah (ö for õ by dissimilation with previous 6).
- 3. 322. Similarly in terminations, where the -m- is not felt to be a part of the root (in Jespersen's sense), it becomes -v-: se.g. 1st sing, indefinite press, puchs and 1st pl. fut. puchisa fr. S. pucchami, pucchisamo (see 4. 3), as opposed to pacmo, etc., where the -m- runs through the paradigm: pacmo, pacmo, pacmo, pacma.

8. 33. When the pre-accentual syllable is long an-

remains: jamāī m. "son-in-law", H. jāwāī s. M. jāvaī s. fr. "jāmātṛkaḥ: jāmātar- s.; samāņā "like" fr. sāmāna- (found in compounds): samānaḥ s. (cf. jōļ f. "twins" fr. "yaugala-: yugalam "pair"; pōthī f. "book" fr. "paustikā: pustakam s.; mōh n. "face": mukham s.; mōgrō m. "jasmine": mudgaraḥ s.; Buddhist Skt. dāridraḥ "poor", Māgadhī dāliddē s.: daridraḥ s.).

3. 3 3 1. samarva "to accommodate", H. samana "to be contained in", M. samava "to contain", cannot be explained as from samapayati "to bring to an end". To suppose a shifting of accent to the first syllable, thus protecting the -m- from change, would necessitate a form samavva; and in any case in H. and M. the -m- would become -v-. The Skt. samyati "to finish, settle" gives as good a sense, and satisfactorily explains the -m-simyati becomes "same (inf. "samva), from which a passive samava (= H. samana) and a causative samava (= M. samava) are formed. Similarly, gamavaa is formed from "gamva: gamayati (cf. ugamva fr. "udganayati).

3. 332. gosdi m. "ascetic", H. gosdi : görvamin- s., ghaŭ n. "wheat", H. géhů, M. gahů s. : gödhümah s., kadar m. "mud", H. kādaŭ, kādau m. "slime" : kardamah s. are loan-words. For the loss of the nasalization in the last see 6. 42.

4. Final -m, -n

4. The development of final nasalized syllables in Gujrāti, including those treated of in 5, depends upon the nature of the preceding vowel. With the low vowels ä and u nasalization is retained; with the high vowel s the raising of the back of the tongue, causing a raising of the back of the velum also, leads to its loss. 1: A. -it., S. -ium, Skt. -ikum, -ilum, is probably later in its origin than the loss of "in s.

4. 1. Final -m.

- 4. 11. -åm, -šm, -šm, Ś. -am, -im, -um disappear in G. when preceded by a consonant preserved into the Ś. period: 1st sing. fut. karté "I will do": Ś. kurissam; acc. sing. kan m. "ear": karnam; jibh f. "tongue": jihvām; ag f. "fire": agnim; dhaman f.: dhaman im; kāg m. "a kind of corn": kangum s.
- 4. 12. Where -am is preceded by a S. vowel, the two are contracted in G.
- 4. 121. -akum, Ś. .aum, A. -aū becomes G. -ā: nom. sec. n. sing. -ū fr. -akum, e.g. āgņū fr. *angunakam: angunam. It should be noted here that the sec. sing. of masc. words in -a (fr. akuh) is -ō, not -ā (fr. -akum) on the analogy: kūn (fr. karnah): kūn (fr. karnum); ghōdō (fr. ghōdakuḥ): ghōdō (for *ghōdā fr. ghōdakum).
- 4. 122. -ikam, -itam, S. -iam A. -in become G. -i: dahl n. "curds" fr. *dadhikum : dadhi n. s. (but see 5. 23), muhl n. "curds" : mathita- "churned". It must be noted that when preceded by a nasal this -l becomes -i : m. puni n. "water" : paniyam s.1
- 4. 2. It is possible that there is a trace of final -n in the nasalization of the adverbs of place tyd, jyd, etc. cf. tasmin.

5. Final -ami, -amah, -ani, -na, -ine

- 5. If the accent of the penultimate stress scheme fell on the termination, it was shifted to the root syllable on the analogy of a majority of connected forms and for the sake of sense protection: e.g. púcchaniaö fr. pucchaniao after púcchasi, púcchai, púcchaha, púccha, púcchau, púcchau, púcchau, púcchau, púcchau, púcchim, pucchim, púcchim, etc., so also púcchami fr. pucchim; (cf. A. pucchami, pucchim), etc. Add to this the growth of other means to replace the ideas conveyed by inflection. with the consequent loss of distinct pronunciation of inflections no longer necessary for intelligibility (see
- ¹ M. Bloch gives the same form for M., but says that it is a matter only of writing, not of speeps. The G. seems to use to be simply paper.

Jespersen, Growth of Language, passim), and it will be seen that the final inflectional syllables came to be pronounced without much stress. This seems to accord with the linguistic history of Gujrāti. For the treatment of the nassis in these syllables differs from that of those in the body of the word. We have already in 4 seen that final -m and -n are treated differently from medial -m-, -n-, becoming a mere nasalization, which under certain circumstances is lost with the vowel it nasalizes. We have now to deal with cases where m and n are not final, but are followed by a vowel.

5. 11. 1st sing. pres. āmi-, \$\hat{S}\. -ami, \$\hat{A}\. -ami, -imi becomes \$G. -n\$, through "\$\delta \tilde{c}(i)\$. If this is so, Pischel (§ 454) is wrong in deriving \$A. vattaa from "vartakam (after the grammarians' form pacakati = pacati) with the secondary ending as in the \$\hat{S}\. fut. karissam. Rather it is from vattāmi, vattami, in which -m- became -\hat{C}\- and -i was dropped (for \$A. -\hat{C}\- fr. -m\- see Pischel, § 251, Bloch, op. cit., § 67, above 3. 32). The \$A. paradigm thus becomes clearer:—

pucchaŭ, G. puchā, fr. pṛcchāmi.
pucchasi fr. pṛcchasi.
(pucchahi, G. puchē, has -h- after 2nd pl.).
pucchai, G. puchē fr. pṛcchati.
pucchahū for *pucchaŭ (after 2nd pl., and with desire
to distinguish it from 1st sing.) fr. pṛcchāmaḥ.
pucchahu, G. puchē, fr. *pṛcchatha(ḥ).
pucchaht, G. puchē, for *pucchanti after the analogy
pucchaŭ: pucchahū: pucchaht.

- 5. 12. Similarly, 1st pl. -āmah (-āma), Ś. -āmō becomes G. -a in the 1st pl. fut., e.g. karīśa fr. Ś. karisedmō, Skt. karisyāmah.
 - 5. 2. In ani, and (and perhaps ini) -n- becomes ".

¹ My views have undergone some changes since my last note in the JRAS.

- 5. 21. n.pl. -āni, Ś. -āiṃ, -aniṃ becomes G. -4,1 e.g. chôkrā pl.: chokrā n. "child"; pakā n.pl.: pako "ripe", etc., cf. M. n.pl. -d. In H. it becomes -r, where it serves as the m.pl., as the n. has been lost, e.g. ghore pl. : ghord sing, "horse". But besides -aim there is also found in Prakrit the form -dni. Did these two forms exist side by side at the same time in the same language? It is possible, perhaps most probable, that -ani represents only a conservatism of writing, and that both symbols were uniformly spoken as -aim. It may, however, he that the two forms were current together. Jespersen, Progress in Language, p. 55, speaking of the shortening of frequently repeated words, says: "Wherever a person is often spoken of, the speaker is understood by everybody before he is half through the name, if it is rather a long one, and therefore he often does not take the trouble to pronounce the latter part of it. He thus exemplifies the principle we meet with everywhere: people do not pronounce distinctly unless they feel that distinctness is necessary if they are to be understood; whatever is easily understood from the context or from the situation is either slurred over or left out completely." Just as in English we have a multiplicity of doublets due to difference in distinctness of utterance e.g. [kiu, ukiu, beykju] = thank you [jes] or simply a nasal vowel with the lips closed = yes so perhaps one is justified in imagining that when a string of words came together all having the same inflection, e.g. sarranciment pakkāni phalāņi, there was a tendency to pronounce one distinctly and to slur over the rest producing something like sarvāni imarm pakkarm phalarm.
- 5. 22. Inst sing. -enu, S. enu, A. -em. -? becomes G -- (M. -e): e.g. dudhe inst. sing. dudh n. milk'. It has been extended, to all nouns of whatsoever origin, e.g. obokere: choker f. "girl".

Only found in also mems, 10. where is sing, 14 &; a stems (e.g. ghar n. "house") have ph in #.

- 5. 23. n. pl. -ini is perhaps to be found in G. dahi fr. dadhini. The Pkt. form dahin points to this derivation rather than *dadhikam (see 4. 2), which would give Pkt. dahiam, while dadhi would be represented in Pkt. by *dahim (cf. Pkt. vārim: Skt. vāri).
- 5. 24. It should be noted that this change affects -nonly when it forms part of an inflection, and does not touch any other unaccented -n-, if it forms part of the root: e.g. mākaņ m. "bug", vēraņ f. "angry woman", kākaņ n. "bracelet": matkun-aḥ, matkun-am, matkun-āḥ, etc., vairiņ-ī, vairiņ-īm, vairiņ-yaḥ, etc., kankanam, kankan-āni, etc.

6. Consonant groups containing a nasal

- 6. All consonant groups are simplified in G. with compensatory lengthening of the previous vowel. If this vowel is preaccentual, it appears as short in Mod. G., while accented \$\vec{u}\$, \$\vec{t}\$ before a Mod. G. consonant group become \$\vec{u}\$, \$\vec{t}\$ (and perhaps in all words of more than one syllable).
 - 6. 1. Stop + nasal.
- 6. 11. In the group guttural + n the n is assimilated. kn: mukārvū "to separate" fr. *mukna-, Ś. mukkū: muktaḥ; sākrū "to be able", Ś. sakkadi; śaknōti s.

gn: någö "naked": Ś. naggö, Skt. nagnah s.; äg f. "fire": Ś aggī, Skt. agnih m. s.; bhågö "broken": bhagnah s.

- 6. 12. In the group jn the j is assimilated, giving nn, S. nn, O.G. nn, nh, G. n wel., or initially n-: rant f. "queen": Ś. ranni, Skt. rajni s.; janot f. "sacrificial cord": yajnopavitam s.; vinavva "to solicit": Ś. vinnavēdi, Skt. rijnapayati s.; an f. "command": Ś. anna, Skt. ajnā: nanva "to try": jnanam "knowledge".
- 6. 13. The groups tm, pn result in a "compromissiant" and become \hat{S} . pp (tt?), mm (?), G. p, m wel.
- 6. 131. tm: ap "you" (polite form): S. appa-, Skt. atma nom. sing. "self".

- 6.132. pn: pamvū "to get": prāpnēti s. Sir G. Grierson's derivation (Phon. ii, p. 17) of pūm- from prāp-(prāpayati?) does not seem to me satisfactory, despite kamāḍ in. "flap of a door": kapāṭaḥ s. (is this m due to contamination with some other word?).\(^1\) āpayati "to get" becomes G. āvvū "to come to". sāmnū n. "dream": svapnam s. 'This is probably a contaminated doublet form fr. *sāmā fr. *svapnakam and *sivnū fr. Ś. sivinam, Pl. *supina-, Idg. *supono-(cf. Gk. ŏπνος fr. *ὑπανος).
- 6. 2. A long masal is shortened wel.: nn becomes n wel. An intermediate stage between nn and n is marked in O.G. (and in O. Western Rājasthāni, see JRAS. July, 1913) by nh. Cf. Tulsi Dās dīnh: Pkt. dinno "having been given". What is the phonetic or physiological explanation of this symbol is unclear. At least it was not identical with nh fr. an, an, in, where h is still sometimes heard.
- 6. 21. nu: there is no certain example of this; the derivation of khûn f. "murder" fr. ksunnuh "pulverized" in face of the Persian khûn "blood" is almost certainly wrong. But cf. n fr. nn fr. nn fr. nn fr. nn fr. jn and ny.
- 6. 22. nn, \$. nn: chāno "concealed": channah s.; an n. "corn": annam "food"; bhīno "wet": bhīnnah "split, disintegrated (*as by water)"; kīnrī f. "fiddle kinnarī "divine musician"; anāj n. "corn 'nīnadyam "food".
- 6.23. mm.: samāren "to kill" fr *sammāraņat.. samō "opposite": sammukhaḥ s.; dam m. 'money drammah "a coin", borrowed fr. Gk δραχμη.
- 6. 3. In the groups semi-vowel + nasal and nasal + semi-vowel, the semi-vowel is assimilated, except in the groups mr, ml where a b is developed between the two sounds, when integrocalic.

¹ M. Bloch (§ 137) follows Grierson, and suggests a feeling of linguistic equivalence between m and r as the cause. This, however, would mem to be wrong in the light of the history of -m- in G.

- 6. 31. Semi-vowel + need.
- .6. 311. rn: kān m. "ear": Ś. kannō, Skt. karnab a. · pan m. " a roll of betel leaf with areca, lime, etc." : parmas "leaf"; sona n. "gold": Ś. sovannam, Skt. sauvarnama.; an n. "wool": arnam s.; jano "old": jarnah s.; van m. "colour": varnah s.: cundro m. "lime-burner": curnakirah a.; cun n. "lime": curnam a.; jino "thin": jirnah " worn ".
 - 6, 312. rm: cam camda n. "leather": S. camman. Skt. carman- n. s.: camar m. "cobbler": carmakarah s.: kâm n. "business": Ś. kammam, Skt. karman- n. s.; ghām m. "sweat" : gharmah "hot"; comas n. "monsoon": caturmasam s.; bham n. "tax on leather": bharman "wages"; kēvaldhām n. "total absolution"; dharma m. or n. " right"; dhā may f. "anake": dharmayah s. ; kā maņ m, " witcherast " : kārmanam s.
 - 6. 3 1 3. lm : kamas f. "sugar-cane juice" : kalmasam "dregs"; gumda n. "boil"; gulma- m. or n. "clump".
 - 6. 32. Nasal + semi-vowel.
 - 6. 3 2 1. ny, 8. na: pan n. "virtue": punyam s.; ran n. " wilderness " : aranyam " forest ".
 - 6. 3 2 2. ny, S. na: sūno "solitary": śūnyah "empty": dhan n. "corn": dhanyam s.; manva "to obey": manuale "to honour"; an' "another": anyah s.; nakhva "to throw down": nyakşah "low".
 - 6. 323. my. S. mm: samava "to be mitigated": samyati "to come to an end"; ghumva "to consider, to resound": HD. ghummai "to roll" fr. *ghumyati: ghumaghumāyatē " to resound ".
 - 6. 3 3. mr, ml become -mbr-, -mbl-, S. mb, G. nasalized long vowel +b; finally, long vowel +m; initial mrbecomes m-.
 - 6.331. mr: mākhan n. "butter": mraksanani "oil": ābō m. "mango": Ś. ambam, Skt. dmram a.;

There is a doublet du : cf. M. dai "and ". M. Bloch (§ 125) suggests an ldg. difference of form.

- tåbu n. "copper": tāmram s.; ām f. "mango fruit": amram s.
- 6.332. ml: ābāvā "to have the teeth set on edge": āmlam "sourness".
- 6. 4. In the group, nasal + stop or sibilant, the nasal is lost and the preceding vowel lengthened and nasalized. In the preaccentual syllable this vowel is shortened, and in the postaccentual shortened and denasalized.
 - 6.41. Accented and prescentual syllable.
- 6.411. nk: dkdi f. "hook": ankah s.; kdkan n. "bracelet": kankanam s.; rdk "humble": rankah "beggar".

nkh : såkhal m. "chain" : śrnkhalah s.

ig: dg n. "limb": anyam s.; dgli f. "finger": anguli s.; bhdgvu "to be broken" fr. bhangyats; piglo "lame". pangulah s.; flg n. "horn": árngam s.; dgnn: angunam; kdg kanguh; rdgdo "walking slowly": rangute "to move to and fro"; dgutho m. "thumb": angusthah s. bhigaro m. "wasp": bhrugah "bee"; dgaro m. 'ember" angarakah s. Final long nasalized vowel + g often appears as long vowel + n (cf. long vowel + m fr long nasalized vowel + h, above 6.33 and below 6.415) I have heard it so at the end of a sentence and before words beginning with a consonant, but never before vowels.

ngh : jögh f. 'thigh" : jungha s. . läghra to fast läghnä n. "fasting" · langhoti langhanam s

- 6.412. ne: pde "5" parien s. ch f. beak' cuncuh f. s.; kāclī f. 'sleeved cost' kuncuks s. lact "bribe"; lancā s., kūcī f 'key" kunciku s. acal m "test": unculah "the hem of a skirt'.
- hj: mdjar n. "cluster of blossoms". maharam s. djut f. "stye in the sye": ahjanam eye omtment" djut "to paint the eyes with collyrium": ahjayatı "to anoint"; pdjut'n. "prisoner's har": pahjaram "cage': bhdjut "to break" fr. *bkahjati; ldjo m. "dispute":

lafijati "to blame"; pijrā "to card cotton": pifijā "cotton"; pājo m. "rubbish": punjak "heap"; mājitk f. " Bengal madder": manijetha s.

6. 413. et: kātō m. "thorn": kantakah a.; vātō m. "share": vantah a.; ghūṭī f. "ankle joint": ghuṇṭakaḥ a.; culva "to pluck": cuntali "to cut off" (fr. *crnlati: krntati?); latva "to plunder": luntati "to rob".

nth; sath f. "ginger": sunthik f. s.; cathva "to turn and toss over": cunthayati "to hurt"; latho "violent": lunthati "to agitato"; kāthāl "maritime"; kanthālah "boat"; kālhō m. "shore": kanthakah "neck, "top of a jar, *edge" (cf. kāthāl).

nd : dåd i f. "clothes-stick" : dandika "stick" ; khåden "to pound": khandatë "to break"; ad m. "testicle"; andah "egg"; middra "to dispose"; mandate "to decorate"; tādlā m.pl. "grains"; tandulam "grain"; bhad "obscene": bhandah "buffoon"; rdd f. "widow": randa s.; mádvó m. "booth": mandapah s.; Cádál: Candălah.

6. 4 1 4. nt : dat m. "tooth" : dantah a.; kat "beloved" : . kantah s.; edt m. "saint": érantah "at peace"; dtardi f. "entrails"; dire m. "division"; antarah "inside, of different form"; vdlarva "to cut through": vyanlaram "difference": tat f. "thread": lantuh m. s.; adtva "to be finished": śāntah "appeased".

nth : gath f. "knot" : granthah s.

nd: kādā m. "onion": kandah "a bulbous root"; phådo "deceit": spandah "rapid motion, "fickleness"; cid m. "moon": candrah s.; khadva "to trample on". lr. *keundati : keunatti s.

ndh: ådhi f. "dust-storm": andhikā "night"; khādh f. "shoulder": skandhah s.; gddhi m. "druggist": gandhikuh s.; bådh m. "dsm":bandhah s.; sådh f. "joint": sandhih f. "connexion"; radhva "to block up": rundkati "to hinder"; edik f. "evening": eandkya "twilight"; vdjh "barren": vandhyah a.

4.41 f. mp : kdp f. "shivering" : kampak a.; cdp# u.

"jack-fruit" : campakak a.; ltpv# "to smear", ltpu# u.

"smearing with cowdung" : limpati, limpanam a.

mb: ldbō "tall": lambah a.; ldblo m. "blanket": kambalah a.; jdbū f. "rose-apple": jāmbūh a.; übī f. "ear of corn": umbikā "fried stalks of wheat". Finally this nasalized long vowel + b becomes long vowel + m: adm f. "head of a pestle" fr. sdb sambō sambah a. (cf. sdbbl f. "iron nail at the end of the yoke"); lūm f. "bunch of fruit": HD. lumbi "bunch". This is probably a sandhi change (cf. -n fr. -ng, see 6. 411) originally only taking place before consonants and at the end of a word group. Hence we find the doublet sūm and sdb "from ring fixed at the end of a stick", both from sambah.

mbh: khbh m. "pot", khbhār m. "potter": kumbhaḥ, kumbhakāraḥ s.; lābhā n. "lottery": lambhaḥ "obtaining"; sābharvā "to collect". sambharati s.; gābhir "grave": gambhiraḥ "deep - sounding". kham m. "pillar" skambhaḥ (also khābh m. s.) rests probably on the form *khāb.

- 6. 416. hm becomes mh, mbh. which falls together with PI. mbh: ababh n. "violation of celibacy frabrahma- (cf. abrahmacaryam with the same meaning) with change of accent to the first syllable.
- 6. 417. nú, ma: via m. "bamboo": wenách s. wise m. "doubt": sumácynh s.. piero "tall': promách s kast n.pl. "cymbala": kumayam "bell-metal".
- 6. 42. In post-accentual syllables (due to secondary accent changes, see 5) the vowel loses its nasality. Present participle -to fr. -ato *-antakah, e.g. puchto fr. *pirchantakah : prechant-, etc. The accent was shifted from -ant- (which would have given *psichāto) to the root syllable. pacds "50" fr. *pācds, paūcātat after ikpacas "51", etc. kudar m. "mad" fr. *kādas. a lospword (cf. H. kūdas).

- 6. 5. The normal development of sibilant + negal weight to be to nesal + A: the A falls together with PI. A and Pkt. A, and is liable to disappear, particularly in uneducated speech. The treatment of sibilant + m is uncertain (see 6. 52).
- 6. 5 1. sp, sn, S. sh, G. nh or n, before which a short vowel appears to be lengthened, when h is dropped.
- 6.511. en: unho or and "hot": useah s.; un(h)afo m. "hot season": useakālah s.
- 6. 512. on: nhava or nahva "to bathe", nahva n. "ceremonial bath"; sudi, sudnam s.; neh m. "love" fr. onkehu: suehah s.; pano m. "flow of milk into the udder": prasnavah "flow".
- 6. 5 2. The examples of PI. im, im, im in G. are not numerous enough to provide a sure description of their history. In the Pkt. dialects (see Pischel, pp. 215 ff.) in, in, in, en, except when an anaptyctic vowel was developed between the sibilant and nasal, seem universally to have become nh. But for im, in, in, in, although most examples show mh, there are traces of two other developments:

 (1) ss, e.g. S. Mahisadi fr. Mahismati, Mg. idasiin fr. itasmin (but -sma always becomes -mha): (2) pph, e.g. bhippha- fr. bhipma-, seppha- fr. itesma- (as well as silimha-, sembha-).
- 6. 5 2 1. Corresponding to these in (i. we find ras f. "reins": rasmin f. s.; and aph f. "warmth": usman-m. "heat" (nom. sing. usmā, i.e. feminine in form). Supposing mh fr. sm to be voiceless, then the development to mph is parallel with that of mh (voiced fr. PI. hm) to mbh (see 6. 4 1 6).
- 6. 5 2 2. Of m fr. mh (fr. sm) we have examples only in two unaccented words: tame "you": RN. yueme (with t- after the singular, and -a- perhaps fr. ame "we"); ame "we": RV. asme s. The retention of the final s is due in both cases to the monosyllabic forms of the sing. me to.

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WEEL THE PROPERTY WASHING IN COURAGE

7. The origin of the present Gujrāti scheme of manals as far as tedbhave words are concerned is, then, as follows:---

WOTES ON DR. LIOURL GILES ARTICLE ON "TUN" HUANG LU"

By SUR RU

FOR the sake of clearness I have grouped my discussions under four separate headings, namely:
(I) Punctuations, (II) Misreadings of the Chinese Text, (III) Errors in the Text itself, and (IV) Other discussions.

1. Punctuations

It appears to me that Dr Giles had great difficulty in punctuating the Chinese MS. As he has pointed out in his article (p. 704), the punctuation is omitted in nearly all Chinese MSS, and it is only natural that a foreign reader should find it not easy to supply. I submit my opinion on the following passages:

1. Page 7, cols. 1-2 of the text (p 726 of the Journal).

Dr (Isles 1	ending	.M	y read	1119
冇	Ti	古	有	順	古
it	12		Ħ	tã	號
泉,	35	稿	泉・	200	嘅
	馬	8		M.	8
	近、	*		近	-
	帝	₩.		前	8

The English version: "The ancients called it Sounding Sand. They deified (or, wondered at, 种) the sand and worshipped (码) it there (圈). Near by to the south is Kan-ch'uan."

Note—The word 幹 is here used as a verb. Dr. Giles' cending 編 類 簽 is an impossible combination. 近 (near by) should go with the next sentence.

¹ JRAH 1914, Pt. III, pp. 708-28.

THE DEADE LU

2. P. 10, cols. 4-6-

Dr. Giles' reading		M	My reading		
Į,	生		手	生	
耐	離		R	M o	
沒	兒		夜•	見	
ř.	女°		神	女	
雅	*		椎	K	
#10	神		中。	神	
夾	所		夾刂	族	
史	#	父	史	绿。	父
猠	歡	拇	張	飲	母
*	23	*	孝	然	*
滋	携	Yi.	鲎	携	苦

"Although the parents were distressed at thus parting alive', the boy and the girl, having been chosen by the spirit, cheerfully took each other's hand and drowned themselves. In the Shén-lung period (AD 705-6) the Governor Chang Hsino-sung," etc. (Cf. Dr. Giles version on p. 719.)

Note.— 住 龍 ("parting alive") is a very common expression meaning "parting of persons with no hope to see each other again". It is often used together with 任 例 or "parting at death". 兒 女 is the subject of the second clause 神 龍 is the name of the first two years of the Emperor 中 景 after his restonation to the throne. Evidently a few years must have elapsed between Chang's appointment to the governorship and his killing of the demon. The latter event occurred in the reign of 玄 紫.

TON MULIO MT.

8. P. 11, col. 8-

Dr. Giles' reading		My reading		
化	B •	化	EI•	
*		*		
	晃		晃	
献。	本	献•	*	
	\$ 0		* -	
	微		鉄	
	额			
	*		*	
	* °		*	
	乃		ሽ	

Note 一神 is the subject of the verb 代, not the object of the verb 塞.

4 P 12 col. 1--

Dr	Gdes' reading		My reading	
	氏	*	氏 ⁹	杉
	貕	At	#	就
	在	龍	在	AL
	簡	香。	16	香
	*	4	*0	張

"(And) decreed that he should receive the title of Lung-shé Chang (Chang of the Dragon-tongue). This is recorded in the official records."

Note.—篇 書 always means official records. The last sentence, 藥 住 篇 書, concludes and authenticates the whole story.

5. P. 12, cols. 2-3 -

Dr. Gile	i' reading	My r	eading
1	郡	1	#5
2 0	城	g ,	鯎
			内
	北		北
			-
	里。		里,
	有		有
	•		
	ti		古
	木 •		木
	陰		陰
	森		森
	ф		4,
	有		र्गा

"One li north-west of the city there is a monastery Shaded among the old trees is a small fort."

Note. -This error of Dr Giles' is almost unpardonable as the passage is so evident

II. Misreadings of the Chinese Tert

1. P. 1, col. 5 -

微 should read 以 (with), not 次. Dr Giles English translation, however is correct on this point

2. P. 7, col. 4-

漫 should read 沃 (to water), not ig Cf. p 11 col 2 where the characters 最 在 should read 沃 往 which is a very common compound for 'demons').

Note.—The writer, or, perhaps more correctly speaking, the copyist, had a fanciful way of writing such characters as 夫 and 犬; of the character 既 on p. 13, col. 2.

3. P. 11. col. 2-

書 should read 書 (to damage), not 書.

III. Errors in the Text itself

- 1. P. 10, col. 2: 人 傳 顧 有 虚.
- # should read #.
- 2. P. 14, col. 4---

The character which Dr. Giles left blank is no word at all. The copyist, it seems to me, wrote **and** by mistake added two superfluous strokes at the bottom. So he crossed it out by the sign **5** and wrote another **and**.

IV. Other discussions

1. P. 2. col. 1-

The "walking radical" L has not been omitted here. Dr. Giles failed to recognize the "grassy" or cursive form of 3.

2. P. 6, col. 1-

Dr. Giles made a very hazardous statement when he determined the date of the manuscript on the ground that a stroke or two appeared to have been purposely omitted in the character #4. I disagree with his supposition for the following reasons:—

First, no stroke has been omitted in this character #1. Secondly, strokes have been omitted in many other words. The copyist, being evidently an unlearned man, was very free in omitting strokes. The most apparent omissions are, for example, #2 on p. 7, col. 3; #2 on p. 11, col. 2; #3 on p. 13, cols. 4 and 5. Shall we also deduce dates from these seemingly intentional omissions?

THE TUN HUANG LU RETRANSLATED

By LIONEL GILES

FEEL very grateful to Mr. Suh Hu for having read my article with such care, and for having pointed out some undoubted mistakes. Unfortunately, there are others that have escaped him, but which have been brought to my notice by my father, Professor Herbert A. Giles, and other scholars, to whom I also tender hearty thanks. In the light of these corrections it seems desirable that a revised translation of the whole text should now be published.

The town of Hsiao-ku [Toil-for-corn] was originally Page 1. Yu-tsé [Fishing-pool]. In the time of Hsiao [Wu] Ti of the Han dynasty Ts'ui Pu-i taught the people to labour in the fields and grow corn, whence the name. Later on it was made a district city (hsien).

The Érh-shih spring is three days' journey eastward from the town of Sha-chou. In the Han period Li Kuang-lisarmy when on the march was suffering greatly from thirst. Having prayed to the spirit of the mountain, he pricked the mountain-side with his sword, whereupon a stream of water gushed out and flowed away to the west for several tens of li into the Huang-ta'ao [Yellow Grass] Lake. At a later date there was a general who Page 2. drank of the water when he was very thirsty, which caused him to fall dead beside the spring. In consequence of this the water ceased to flow, only rising up to the level of the ground. Ever afterwards, when many people came to drink, the flow of water was abundant; when few came the supply was scanty; if there was a great

multitude from the city, which consumed large quantities, the water poured forth in a tumultuous stream; and these phenomena continue down to the present day.

The Erh-shih temple, which stood by the roadside, has long been in ruins. Stones from it have been piled up together, and to this spot travellers come with their camels and horses in order to pray for good luck. Going east, you pass into the territory of Kua-chou.

South of the city of Sha-chou, at a distance of 25 li, are the Mo-kao caves. The way thither takes you through a stony desert with undulating ground, and when you reach your destination there is a sharp descent into a valley. To the east of this point stands the San-wei Mountain, to the west the Hill of Sounding Sand. In between there is a stream flowing from the south, called the Tang-ch tian [Tunnel-spring].

In this valley there is a vast number of old Buddhist temples and priests' quarters; there are also some huge bells. At both ends of the valley, north and south, stand temples to the Rulers of the Heavens, and a number of shrines to other gods; the walls are painted with pictures of the Tibetan kings and their retinues.

The whole of the western face of the cliff for a distance of 2 li, north and south, has been hewn and chiselled out into a number of lofty and spacious sand-caves containing images and paintings of Buddha. Reckoning cave by cave, the amount of money lavished on them must have been enormous. In front of them pavilions have been erected in several tiers, one above another. Some of the temples contain colossal images rising to a height of 160 feet, and the number of smaller shrines is past counting. All 2 are connected with one another by

Page 3.

Page 4.

Page 5.

[&]quot;My conjecture of the confirmed by Professor E. H. Parker, who may that it is quite the ordinary "grains".

galleries,1 convenient for the purpose of ceremonial rounds as well as casual sight-seeing.

On the hill to the south of this there is a spot where the Bodhisattva Kuan-yin once made herself visible. Whenever people from the city go to visit it they make the journey on foot, both going and returning; that is the way in which they express their revorence.

The Hill of Sounding Sand is 10 h away from the city. It stretches 80 /1 east and west, and 40 /i north and south, and it reaches a height of 500 feet in places. The Page 8 whole mass is made up entirely of pure sand. This hill has strange supernatural qualities. Its peaks taper up to

- 1 My father is of opinion that the Chinese 🏚 🍍 雄 🛣 🍇 cannot yield the meaning which I adopted first, namely, "all are freely accessible from the outside" On the other hand, I have ascertained from W. Pelliot that there is no internal communication between the His letter, however, which reached me just too grottos themselves late for insertion in the original article, suggests the true solution of the difficulty. " Pour la question que vous me juser, il va sana dire que j'as sur l'aménagement des grottes de Touen houang des souvenirs vieuels et documentaires fort précis. Il y a plusieurs rentaines de grottes et il n v a pas de passage interieur de l'une a l'autre pour les grottes qui n ctaient pas au niveau même du sol, beaucoup etaient reunies par des galeires, des ladcons parfois couverts et dont certaine subsistent, vous en avez probablement des specimens dans
- * The two characters "ten" should, I think, he deleted, which would reduce the hill to the more reasonable proportions of 8 × 4 h.

certaines des photographies de Stein Presine tous les balcons

subsistants sont tres auriens, il en est du xe aierle "

- 1 I sanot quite accept Mr. Hu a assertion (11, 2) that no stroke has been That at least one stroke is wanting seems to me as plain omitted in 🕍 👚 as a pake staff. But I am inclined now to believe that the character was so written simply as a wint cursive form, and not because it was tabou.
- * There are two reasons, according to my father, why 🕷 must be plural here (1) the natural meaning of 🌉 is "among" or "in lietween", as wen in 看 🔯, p. 13, col. 4; (2) the words 👚 🍱 ## . just below, can only mean "all clamber up some high peak" (not "to the summit"), implying that there is more than one. The latter argument seems pretty conclusive; but as regards my former residence of (on the hill), I can point to a similar use of the word in the Lies Chai, Tan Ming-latin edition, chian 1, f. 10 ve, col. 6: 斯乃萬無無無點豐豐 "the old priest took some solesors and out one a circular piece of paper like a mirror, which he proceeded to stick on the wall ".

a point, and between them there is a mysterious hole which the sand has not been able to cover up. In the height of summer the sand gives out sounds of itself, and if trodden by men or horses the noise is heard many tens of li away. It is customary on the tuan-wu day (the Dragon festival on the fifth of the fifth moon) for men and women from the city to clamber up to some of the highest points and rush down again in a body, which causes the sand to give forth a loud rumbling sound like thunder. Yet when you come to look at it the next morning the hill is found to be just as steep as before. The ancients called this hill the Sounding Sand; they deified the sand and worshipped it there.

Page 7.

Near by, to the south, is the Kan-ch'uan River. Tracing it southward from the Hill of Sand, we find its original source to be in the Great Snowy Mountains (the Nan-shan range). It enters the Tun-huang district through the territory of Shou-ch'ang hsien in the south-west. On account of its fertilizing properties it is commonly called Kan-ch'uan [Sweet-spring].

The Chin-an [Golden Saddle] Mountain is situated to

¹ 物 前 19 evidently a stock phrase for tapering mountain peaks.

I have just come across it again in the preface to 重 區 產 集

^{*} The word #, as my father points out, can hardly be a well here, though the Sha chos chih has the gloss # It is simply a mysterious hole, such as our mediaeval writers have termed a cunnuc dialods

I have adopted Mr Hu's correction (t. 1), but though he is doubtless right in saying that 獨 to a verb, and that 爲 closes the sentence. I do not feel quite so certain about 神. It is a fact that the name 神 "spiritual sand" was applied to the hill. See Fa thing IT'ung Chih, ch. 170, fol. 4 r., col. 1 佛 神 道 一 名 神 神 道 Professor Parker has also pointed out my mistake with regard to 禹, but he goes on to say "I don't think it will be possible to find anywhere, at any date, an example of yen being followed by anything but a 常 事, and (as I showed) it seems always to "the French ra or p" In reply, I must confront him with his own words in the China Review, vol. xiv., p. 200: "Finally, yen occurs in a medial chit."

'and (they said) there was no one to prevent him 's missions quiden preventurem. Fen here has the force of quiden."

the south-west of the Hill of Sand. It has snow on it Page 8. throughout the summer. There is a shrine there of high spiritual potency which people dare not approach. Every year the local chief macritices to the god of the mountain with his face turned in that direction, and offers up a fine horse, which he drives into the recesses of the mountain. But if he ventures too near he immediately provokes a destructive hail-storm, with thunder and lightning,

South-west of the city stands the Li Hsien-wang temple, that is to say, a temple dedicated to the ancestors of Chao Wang of the Western Liang State. In the chien teng period (A t) 666 8) a lucky stone was picked Page 9. up close beside this temple, its colour was bluish-green, and it bore a red inscription in the ancient character, to wit. 'I can foretell thirty generations, I can foretell 700 years. To-day this temple is known as the "Li temple"

West of the city is the Yang Barrier, which is the same as the ancient Yu-men (Jade Gate) Barrier. It was because Yang Ming, when Governor of Sha-chon, resisted an Impecial warrant for his arrest and fled over the border by this gate, that it afterwards came to be known as the Yang Barrier. It connects China with the capital of Shan-shan but the natural obstacles of the route and its deficiency in water and vegetation make it difficult The frontier-gate was afterwards shifted to Page 10. to traverse the east of Sha-chou.

Eighty-five le west of the city is the Yu-nu [Beautiful Woman! Spring The stories that have been handed down about it are largely fictitious! Every year a youth and a maiden used to be conducted to this spot by the people of the district and sacrificed together to the spirit

^{1 🏥 .} the reading proposed by Mr. Hu (in, I), appears to me a doubtful and unnecessary conjecture. In any case, I have to deal with the text as it stands, and there can be no doubt that the character written by the copyist is R. It is used again in the name figurative sense on p. 13, col. 5.

I have now come to the conclusion that the character which I first took to be 產 in really 姿。

of the pool. This ensured a plentiful harvest, but if the ceremony was omitted the crops were spoilt. Although the parents were bitterly distressed at having their children thus torn from them, the boy and girl who had been chosen by the spirit would cheerfully take each other by the hand and drown themselves.

In the shin-lung period (A.D. 705-6) the Governor Chang Haiso-sung on arriving at his post made inquiries Page 11. about this custom from the inhabitants of the district. They gave him particulars, whereupon the Governor exclaimed in anger: "I won't have this bogy in the fountain injuring us with its miraculous tricks!" 2 So he had an altar erected, and sacrificial victims prepared alongside the spring. Then he called out: "I prithee reveal thy true form, that I may sacrifice to thee in person." The spirit forthwith changed into a dragon and came out of the water, whereupon the Governor drew his bow and shot the creature in the throat; then he whipped out his sword and cut off its head. This, on a subsequent visit to the Palace, he presented to the Emperor, Hsuan Tsung, who showed great admiration for his exploit and graciously bestowed on him the tongue of the dragon. with a decree that he should receive the title of Lung-she Page 19. Chang Shih (Mr. Chang of the Dragon's tongue). This is

One li north-west of the district city there is a monastery and a thick clump of old trees. Hidden amongst them is

entered in the official records.

It is an almost diabolical coincidence, from the translator's point of view, that this spirit dragon (skén ling) should have been slain in precisely the skén-ling period.

Professor Parker also suggests instead of , and takes exception to my statement that (E is a vulgar form of E; but my authority is K'ang Hu's Dictionary, which further states that this form was originally a variant arbitrarily introduced into the "cierkly style" of handwriting by E . We Chen ching (a.e. 709-85).

My father points out that & m in this context not chies but heirs !

[.] More literally, "last [an arrow] on the string."

Mr. Hu (i, 5) is very severe on my personation here, although the sense of the passage remains unaffected. Indeed, in the Knylish is in

a mound on the top of which is erected a miniature palace, complete in every part

There was formerly a sub-prefect of Sha-chou, one Chang Ch'iu, who, when already advanced in years, took a fancy to the spot and settled down to live there. Although not a man of wide scholarship, he was exceedingly earnest and painstaking, for after the country had passed through many years of revolution, and but few man were Page M. left to practise the instructor's calling, he collected the younger generation together in order to expound to them the great principles of government. But God could not spare him long for the people to enjoy his bounty.

The Alabaster Mountains are 256 /i to the north of the city. The alabaster is found among the rocks on the Wu [Black] and the Fêng [Beacon] Mountains. 19th year of kui-huang (A.D. 599) the Black Mountain turned white. The fact has been verified and found to be no empty fable. The Taoist monk Huang-fu Tê-tsung and others, seven in all, were sent there to make sacrifices And ever since then the mountain has had Page 14. and libations all the appearance of being a snow-covered peak.

The town of Ho-twang is 230 le north-west of the city. In ancient times a military magazine stood here.

The Great Wall, built 1 under the former Han dynasty. passes 63 li to the north of the city and runs due west out into the desert.

Going north, you enter the territory of I-chou [Hami].

better to put the stop after "trees", which in Mr. Hu's version seem to spring from nuwhers. Much more important is the fact, noted by my father, that E is here "a mound" and not "a fort".

- 1 Mr. He has certainly solved the difficulty here (iii, 2). I had already received the same correction from Mr. Edmund Backhouse, of Paking, who has had considerable experience of Chinese MSS. "How often," he says, "have I been reluked by scholars for scratching a character out instead of keeping the page tidy by re-writing it and adding the to show that the wrongly written one was to be passed over."
 - Omitting the characters 1 1 and placing a stop after E.

THE ARCHIVES OF AN ORACLE

By L. C. HOPKINS

MEAGRE and disappointing as it seems, the collection of phrases and sentences that follows has been extorted from the nearly nine hundred specimens of inscribed bone and horn fragments in my possession only after close study during six years. Whether the result is worth the work and the time, it is useless now to ask. But such as they are. I have desired to put before other workers the deciphered extracts from these unusual records for two The first is that I seem to have reached the limit attainable by my own individual efforts. The second and especial reason is that if other students of Chinese would consent to devote some attention to the texts now presented and translated. I am confident that numerous difficulties would be cleared up, not a few fruitful auggestions elicited, and-it would be too foolish to think otherwise-various errors and ignorances exposed. all or any of these consequences should follow, much needed light would fall on dark places, and some misty uncertainties be dissipated. I feel fairly convinced that there are things of real interest concealed in the legends on these objects, and I suspect also some surprises.

In the following number of this Journal I hope to publish some Notes on the passages now presented, together with a Plate of facsimile copies of the original texts, of which the modern counterparts are given below. The want of corresponding facsimiles has detracted from the value of the list of similar extracts which filled the last pages of Mr. Lo Chên-yu's admirable pamphlet Yin's Shang Chêng Pu Wên Trê K'ao, "An Examination of the Characters used in Divination in the Yin-Shang Dynasty."

PHRASES OF TWO WORDS

- 1. 安 \$ an hsi, content and happiness.
- 2. 安樂 an lo, content and joy.
- 3. 县 生 ch'ang shéng, long life.
- 4. 正月 chéng yüch, the 1st month.
- 5. 古 祥 chi hniang, good fortune.
- 6. 世 H chi jih, a lucky day.
- 7. 古 體 chi pi, a lucky disk.
- 8. 實 魚 chi yū, a lucky fish (i.e. a cowrie).
- 9. 4 [] chin jih, to-day.
- 10. 今月 chin yuch, this month.
- 11. 降 古 chiang chi, to send down good luck.
- 12. 降 ik chiang fu, to send down happiness.
- 13. 降 離 chiang beiang, to send down good fortune.
- 14. 📫 🐞 chung li, in the centre.
- 15. chung tsung, the Temple-name of the Emperor Tai Mou of the Shang dynasty, reigned 1637-1562 B.C.
- 16. 篇 静 fu ching, happiness and peace.
- 17. A s fu hei, happiness and joy.
- 18. 篇 鲜 fu hsiang, happiness and good fortune.
- 19. 🗰 🍍 fu shou, happiness and long life.
- 20. E hei li, in the West.
- 21. ## hei ling, the Western Passes. (Said to be also an ancient tribal name, see Chavannes, Mémoires historiques, vol. i, p. 34, n. 4.)
- 22. 群 吉 hniang chi, good fortune.
- 23. 群 日 haiang jih, a fortunate day
- 24. 群 譽 hsiang pi, a fortunate disk
- 25. 行 龍 hoing lung the moving or soaring dragin
- 25a, 1 4 biao lao the lesser sacrifice
- 26. 日 月 jih yush, sun and moon
- '27. 來 解 lai heiring, to bring good fortune to incks sake.
 - 28. 🏦 🏥 ling chung a magic bell
 - 29. 童 ま ling kuei, a magic tablet

- 30. 👚 🛔 ling kuci, a magic tortoise.
- 31. 🏦 🗮 ling pr. a magic disk.
- 32. 🗮 🗂 ling yú, a magic fish (viz. a cowrie).
- 33. 🌞 👛 lo losi, mirth and joy.
- 34. 🏙 🏙 lung pr, a dragon disk.
- 35. 卯 字 man lao, a male victim for sacrifice.
- 36. 卯 牛 mac neu, a bull.
- 37. 南 I nan li, in the south.
- 38. 年 吉 nien chi, harvest favourable.
- 39. 北 I jei li, in the north.
- 40. 白 泵 pai shah, a white pig.
- 41. 三 計 sun ch'ou, trebly distilled spirit.
- 42. 三 光 san Kuang, the Three Lights (Sun, Moon, and Planets).
- 43. 上 天 shang t'ien, Heaven above.
- 44. # # shéng té, abundant virtue.
- 45. 🕿 🏙 shéng té, sacred virtue.
- 46. 要 年 shon nien, the year's harvest.
- 47. 基子 sun tzñ, grandsons and sons.
- 48. 大吉 ta chi, great luck.
- 49. 大算 tu haiang, great fortune.
- 50. 大 本 ta lao, the greater sacrifice.
- 51. 大宣 to shih, the principal apartment of the ancestral temple, modern 太宝 fai shih.
- 52. 大袋 to foung, the ancestral temple.
- 53. 大陰 ta yin, the great feminine, probably the moon.
- 54. 大月 to yuch, probably for 大悦 to yuch, great joy.
- 35 大自 to yu, heavy rain
- 56 得 古 tř che, may he have good luck.
- 57. 得 群 ti hourng, may be have good fortune.
- 58 得 縣 to lu, may be have prosperity.
- 59 多省 to che, much good luck.
- 60 多群 to having, much good fortune.
- 61. 多利 to li, much benefit.
- 62. 多 to fu, much happiness.

- 63. 多葉 to sun, many grandsons.
- 64. 多子 to tzŭ, many sons.
- 65. + to ien chi, a thousand-fold good luck.
- 66. 静陽 toing yang, perhaps for 青陽, the "pure masculine"; a term for the Sun.
- 67. 左 I two li, on the left.
- 68. 住 篇 tso kuei, to scorch the tortoise-shell.
- 69. B I tung jih, the day of the supplementary sacrifice.
- 70. 東 E tung li, in the east.
- 71. ⑫ 孝 wang heing, an Imperial visit.
- 72. 文 圭 wen kuei, a decorative tablet.
- 73. 女 睦 wen pi, a decorative disk.
- 74. 亡 🎁 wu chien, no difficulties.
- 75. 亡 條 wu hui, no regret.
- 76. 亡 K wu tsai, no calamity.
- 77. K Wyin yang, the feminine and the masculine.
- 78. 右 夏 yu li, on the right.
- 79. 元 吉 yuan chi, prime good luck.
- 80. 元 鮮 yuan haiang, prime good fortune
- 81. 月 宫 yuch chi, the moon lucky (or auspicious)
- 82 月 前 yuch losing, the moon fortunate (or auspicious).
- 83. 月 D yuch pi, a moon disk.
- 84 月 稳 yuch te, the virtue or influence of the moon
- 85 永 曾 yung chi, perpetual good luck
- 86. 永年 yung nuen, years without end

PHRASES OF THREE AND FOUR WORDS

- 88. 日在實jih tsai Yin, the sun being in Yin.
- 89. 兼行多事 lit haing to ning, a journey with much tranquillity.
- 90. 保 其 查 pao ch'i chih chi, keep him in the utmost welfare.
- 91. 保 其 羅 田 pao ch'i fu t'ien, preserve his tield of happiness.

- 92. 不幾大兩 pu kou to yë, not to encounter heavy rain.
- 93. 得 雅 安 维 lé fu an lo, may he have happiness, case, and joy.
- 94. 多農群 to ch'ing haiung, many happy eventa!
- 95 3 in # to fu hairing, much prosperity.
- 94 七月 亢日 ta'i yuch yuan jih, the lat day of the 7th moon.
- 97 子孫萬年 tzũ sun uan næn, posterity in perpetuity.
- 98. 子孫延年 tzñ sun yen men posterity for many ages
- 99 子孫永田 tzō sun yung yung, for the perpetual use of his sons and grandsons.
- 100 王 **卜 真** wang pu chéng, the king consulted the oracle by the tortoise-shell.
- 101 延 🎍 畔 yen chang hsiang, continual happiness
- 102 延 編 辞 yen fu learny, continual prosperity.
- 103 延年得費群 yen neen tế ch'ing haiang, having happiness for many long years.
- 104 子內山 yu her shan, m, or to, the western hills.
- 105 月 古日畔 yuch chi jih hsiang, the moon lucky. the sun auspicious.

SENTENCES

- 106 示 非雅 鹿 shih ch'i kuo lu. Foretells the capture of deer
- 107 田 射 黨 克 tren she wan lu. May be chase and shoot a myrind deer.
- 105 九月盲日作籍来解今日丽至 chiu yush chi jih teo kuci lui herang chin jih yü chih. In the ninth moon on a lucky day scorched the tortoise for luck's sake. To-day rain will come.
- 109 其日王弟萬鹿蹄ch'i yuch wang ché wan lu heiung. The [omen] says the king's shooting will be altogether fortunate.

- 110. 今 [] 兩來月 吉 chin jih yü lai yuch chi. To-day rain will fall and the coming month will be lucky.
 [Or perhaps, may to-day's rain bring in a lucky month.]
- 111. 戊申卜貞王徒子 邵往來無 凝 mou-shén pu chéng using hai yü Shao wang lai wu tsai. On the day mou-shén took an omen as to the king moving to Shao: nothing harmful in going or returning.
- 112. 了 亥 卜 貞 王 徒 往 來 無 災 ting hai pu chéng wang hai wang lai wa tsai. On the day ting-hai took an omen as to the king moving: nothing harmful in going or returning.
- 113. 壬午卜貞王田往來無災 jéu wu pu chéng wang tien wang lui wu tsai. On the day jéu-wu took an omen as to the king hunting: nothing harmful in going or returning.
- 114. 戌申卜。 貞。 作大邑于 [text broken off].

 mou shên pu—chêng—tso to i yu. On the day

 mou-shên took an -omen -as to building a large
 city in . . .
- 115. 自今至于辛亥丽 tan chin chih ya hsin hai ya. From to-day until the day hsin-hai it will rain.
- 116. 今日示 北南 chin jih shih chii gu. To-day the indications are for rain.
- 117. 辛 卯 卜貞王 徒 于 京 往 來 然 L bein more pu chéng wang hei yū ching wang hei wu tsai. On the day hein-mao took an owen as to the king moving to the capital: nothing harmful in going or returning.
- 118. 戊子卜真王徒子胜往来 mon tru pur ching wang hei yū yung wang hai [the usual wa tsui, "nothing harmful," is omitted]. On the day mou-tru took an omen as to the king moving to Yung: in going or returning.

- 119. 乙未卜貞自武乙三日 i wei pu chéng tzū wu i san jih. On the day i-wei took omens from Wu I for three days . . .
- 120. 曼有五字 shou yu wu luo. Received five sacrificial victims.
- 121. 王卜貞田移住[末無] 英王。日古遊記 獲住二百十五爻 - 唯二 wang pu chéng tien ling wang [lai wu] tsai wang - gueh chi tzǔ chi huo chui erh po shih wu t'u i chih erh. The king took an omen as to hunting in Ling: [nothing] harmful in going [or returning]. The king's -- said good luck. It is now noted that there were captured small birds 215, hars 1, pheasants 2.
- 122. 癸 酉 卜 行 真 kuci yu pu hoing chéng. On the day kuci-yu took an omen as to a journey.
- 123. 己丑卜疑食今月無 chi ch'ou pu i chéng chin yuch wu... On the day chi-ch'ou took an omen as to a doubtful matter. This month there will be no [text here broken off].
- 124. 戌中 ト 康 真 mou shên pu lü chêng. On the day mou-shên took an omen as to an expedition.
- 125. A R ching we law. Took omens from five victims. [Presumably from the bones of these beasts after slaughtering them for sacrifice.]
- 126 所 年 角 今 月 無 四 kéng wu pu chéng chin yuch wu hainng. On the day kéng-wu took au omen. This month there will be nothing untoward. [Same sentence with different cycle characters on H. 69.]
- 127. 戌亥王 h mon hai wang pu. On the day monhai the king took an omen. [Sentence complete, no other characters.]
- 128. 自 f 出 行 至 f 医 * tzüshang t'ien heing chih yü yü wu —. From Shang Tien travelling as far as Yti [in Honan] there will be no —.

[The unknown character probably stands for some such word as "untoward".]

- 129. 乙 香 卜 兼 貞 王 共 田 子 * 往 本 無 英 在 一 月
 i yu pu lū chéng wang ch'i tien yū—wang lai
 wu tsai tsai i yueh. On the day i-yu took an
 omen as to an expedition. The king will hunt
 in [here follows a blank space in the original].
 No mishap in going or returning, in the first
 month.
 - 130. 自上田本至于観念一人無凶 tzǔ shang t'ien tsu chih yū yū yū i jēn wu hsiung. Hastening from Shang Tien as far as Yū, I, the One Man, shall have no mishap.
 - 131. 無水在九月 wu shui tsai chiu yueh. No floods in the ninth month.
- 132. 王 北 田 無 異 wang ch'i tien wu tsai. The king's hunting will be without mishap.
- 133. 非 * 于 霸 有 大 雨 eh'i -- yü yü yu ta yü. The -- at Yü, there will be heavy rain.
- 134. 王 基 徒 子 向 無 英 wang ch'i hsi yū hsiang wu tsai. The king will move to Hsiang without mishap.
- 135. 乙亥卜貞王 井 田 無 與 i hai pu chéng wang ch'i tien wu tsai. On the day i-hai took an omen as to the king's hunting: no mishap.
- 136. 會第子子孫曰 ming ti yu ten sun gush. Commanded his younger brothers and his sons and grandsons, saying . .
- 137. 在祖乙宗 tsai tsu i tsung. In the ancestrai temple of Tsu I.
- 138. 辛 赛 學 佛 弟 hain hai shuai mu ti. On the day hain-hai will [or, did] conduct mother and younger brothers.
- 139. 已 亥 貞 其 稿 子 雅 乙 chi hai chéng ch'i ta' it ya tou i. On the day chi-hai took an omen as to the sacrifice to Tsu I.

- 140. 癸丑卜貞今獻無大水 kuei ch'ou pu chéng chin sui wu ta shui. On the day kuei-ch'ou, ascertained by omen that this harvest there will be no floods.
- 141. 要 丑 卜 貞 蚕 月 衛 關 kuci ch'ou pu chéag chi tz'ň yuch yu yū. On the day kuci-ch'ou ascertained by omen that by this month there will be rain.
- 142. 癸未貞有無論 kuei wei chéng yu wu huo. On the day kuei-wei took an omen whether or not there will be misfortune.
- 143. 妥 丑 卜 真 育 無 鞴 kuci-ch'ou pu chéng yu wu huo. On the day kuci-ch'ou took an omen whether or not there will be misfortune.
- 144. 獲 鹿 三 huo lu sun. Caught three deer.
- 145. 貞自今至于废戊不其爾 chếng trữ chin chih yữ kếng-hsữ pa chỉi yữ. Took an omen that from now till the day kếng-hsữ it will not rain.
- 146. 真今日不其前 chéng chin jih pu ch'i yit.
 Ascertained by omen that it will not rain to-day.
- 147. 己卵真告于父丁 chi mao chéng kuo yū fu ting. On the day chi-mao took an omen as to an announcement to Father Ting.
- 148 甲長齡獎吉魚羅祥 chia chiến kei pi chí yữ in hsiang. On the day chia-chiến presented a disk and a lucky fish [viz. a cowrie]; good fortune.
- 149 辛亥省伯翰馨 hain hai shang po kei pi. On the day hain-hai the Baron of Shang presented a disk.
- 150. 两 电 五 月 吉 日 輪 整 洋 日 孫 子 * 一 魚 ping shén wu yuéh chi jih kei pi heiang jih sun tzu—i yū. On the day ping-shén, of the fifth month, being a lucky day, presented a disk. On a fortunate day the grandsons and sons—a cowrie.

- 151. 癸卯赐 襞 kuei-mao tz'ŭ pi. On the day kuei-mao bestowed a disk.
- 152. 戊寅翰整吉祥 mon yin kei pi chi hsiang. On the day mou-yin presented a disk: good fortune.
- 153. 癸巳 * 給月整吉 kuei-ssǔ—kei yueh pi chi.
 On the day kuei-ssǔ—presented a moon disk:
 good luck.
- 154. 今日 開降 集西 基 chin jih yū chiang ch'i hei li. To-day rain will fall in the west.
- 155. 月 德 吉 跨 yuch the chi heiang. May the moon's influence bring good fortune!

I will close these extracts with two which have a definite historical interest, inasmuch as they seem to refer respectively to the first, and the last but one, of the sovereigns of the Shang or Yin dynasty, which lasted from n.c. 1766 to n.c. 1122.

156. 大 Z. Ta I. These characters occur twice in my collection, viz. on H. 28 and H. 365. and seem to designate a personage so named. In the first example, on a fragment of deer's horn, they are inscribed side by side, the rest of the legend being in vertical columns. This horizontal juxtaposition is frequent, though not universal, on these relies with the names of personages. (I have noticed it particularly in the case of Tsu I. who reigned n.c. 1525-1506, e.g. on H. 365.) But on H. 365 the two words Ta I appear in the ordinary vertical sequence.

Now the curious thing is that there is no Shang dynasty emperor named Ta (or Tai) I in the received list of those sovereigns. However, the Historical Memoirs of Sau-ma Ts'ien state that the personal name of Ch'eng Tang, the founder of the dynasty, was Tien I (\mathcal{K} Z). And the Chinese author, Mr. Lo Chen-yu, in his Vin-Shang Cheng Pn Wen Tz'ū K'ao, Examination of the characters used in divination in the Yin-Shang dynasty. p. 3, has ingeniously observed that, judging by the analogy of the names of the early rulers of the dynasty. Thi Ting.

Tai Chia. Tai Kèng, and Tai Mou, there can be little doubt that the received 天之. Tien I, is a misreading of 大之. Ta I. I feel confident Lo is right in this. The early forms of 天 and 大 are very like, and this, I suspect, is only one of many blunders made by the Han scholars in reading and transcribing early original records. It would certainly otherwise be difficult to explain how that of the illustrious founder of the dynasty should be among the few Royal names absent from those mentioned on these bones.

157. The last extract I shall give is from a unique form of symbolic disk. The latter is of the usual type, but surmounted by a crescent moon with the two horns attached to the edge of the disk. Joined to the lower limb of the main disk, opposite the crescent, is a much smaller circle, which presumably symbolizes the sun. The main disk, the crescent moon, and the small disk are all covered with characters on both sides. The following passage is the opening part of the main inscription on the obverse, of which it forms rather more than a third, runs, in modern script, and with reservations explained in my notes as to the 8th, 13th, and 17th characters. 甲申王卜貞受乙翰其曰天陰之曰大陽之 . . . chia shen wang pu chéng shou i kei ch'i yueh ta yin chile queleta yang chile . . . "On the day chia shen the king inquired by omen from Shou I as to giving that which is called the Great Feminine, and that which is called the Pure Masculine . . . ," the "Great Feminine" and the "Pure Masculine" being no doubt the moon and the sun. In the notes I discuss several points of transcription and translation raised by this passage, but here I desire to call attention only to the name Shou I.

In these two characters, \bigotimes in the original, I believe we have the true name of the last sovereign but one of the Shang dynasty, known in the received text of Sanna Ts'ien's Historical Memoirs as \bigotimes Z Ti I. It will

naturally be asked what arguments I can urge for such a novel opinion. Let me give them. In the first place, let us notice that the designations of the last two rulers of this dynasty are differently given in the Historical Memoirs and the Bamboo Books. In the Memoirs they are styled 常 乙 Ti I, and 針 華 Chou Hsin; in the Bamboo Books. Ti I and 常 華 Ti Hsin. The early commentator on the latter work adds the rather enigmatic note upon Ti Hsin, 光 受 即 射 撒 日 受 華 ming shou tsi chou yeh yuch shou hsin, "His name was Shou, that is Chou. He was called Shou Hsin." Observe the apparent confusion here between Shou Hsin and Chou Hsin, and the conflict of the two authorities. (In the Book of History, Shang Shu, the name is always Shou, not Chou.)

Now if the old text of the Bamboo Books, and the genealogical records which may have formed part of the basis of Sau-ma Ts'ien's History, contained a form resembling this character Shou as written on this and other bone fragments, it might well have been misread as \$\frac{1}{2}\text{ chou by the Han scholars, and the annotator of the Bamboo Books may be correct in his note that Shou Hsin was the real designation of the last sovereign. And this name Shou may have been inherited from his father the so-called Ti I, who, as I suggest, was really the Shou I of our relic.

I had made a note to the above effect before I chanced upon a happy confirmation of this conjecture in the pages of the Liu Shu Ku of Tai Tung, under the character 没 He writes: "The Shang sovereign Shon 爱 is always thus written in the Book of History: in the other classical works always 對 chou. One man should not have two names. Moreover, exclusive of this Shang dynasty Chou. the word has never been used, being an error for Shou" (my italics).

Of course, the fact that the last of the dynasty was known as Shou Hain does not prove that his father was

known as Shou I But when we find a personage of that name who appears to have been a sovereign, but who cannot be identified eo nomine as one of the known line of Shang, the presumption seems strong that the foregoing auggestion is correct, especially as all the other three rulers having in their names the character I'Z, vis. Tsu I, Haiao I, and Wu I, are found on the bones indicated by those very designations. The case of Tien I, alias Ta I, we have already discussed.

THE ZOROASTRIAN PERIOD OF INDIAN HISTORY

By D. B. SPOONER

EVER since the exact site of Aśoka's classic capital was determined for us by the keenness and sagacity of Colonel Waddell, it has been a dream of the Government of India in the Archwological Department to subject the site of Pāṭaliputra to an examination commensurate with its importance. Colonel Waddell had, however, so abundantly demonstrated, in his trial excavations, the difficulty and costliness of extended operations here, that the dream had, until recently, appeared remote of realization. The munificence of Mr. Ratan Tata of Bombay has made the undertaking possible, and his offer of twenty thousand rupees a year, for an indefinite number of years, has enabled the Archwological Department to take up the work on a scale that would otherwise have been far beyond our

My own personal thanks are due to Dr. Marshall, the Director-General of Archmology in India, for having entrusted me with the direction of this work. It is a privilege such as has come to few men in the Indian field.

This is not the place to enter upon any detailed discussion of the actual work so far accomplished. A more or less adequate statement of the progress made has already been published in the Annual Reports of the Archeological Survey, Eastern Circle, for the years 1912-13 and 1913-14, and reference may be had to these for the particulars of the work. It is, however, essential that a brief résumé of our results should be given here, as it is directly out of the excavation that the inquiry has grown whose results are embodied in this paper.

Colonel Waddell, it will be remembered, made a preliminary examination of several detached sites in and around Patna. Among these was a field situated between two tanks in the immediate neighbourhood of Kumrahar, a village south of the modern city. Here the Colonel recovered certain fragments of polished stone with a curving surface, which he rightly judged to be portions of Mauryan pillars. These, he was inclined to think, must have been of Asokan manufacture. And, as the Chinese pilgrims tell us that Asoka erected at least two inscribed pillars in his capital, Colonel Waddell thought that one of these two must have been located somewhere in this neighbourhood. view of the very little evidence available as a basis for judgment at that time, these conclusions were warranted, and in determining to open Mr. Tata's excavations at this site the Department was not without hope of proving that Colonel Waddell was right.

The work was begun on January 6, 1913. It soon became apparent, then, from the multiplicity, varied texture, and small diameter of our pillar fragments, that they could not have emanated from an edict column. I therefore assumed that some Mauryan building must have been situated here, and altered my methods of work to suit this changed hypothesis. The result was entirely satisfactory. as on February 7, one month from the commencement of the work, the columnar rows of a vast pillared hall were located. It has proved, however, a work of unusual difficulty to determine the extent of this building, owing to the singular fact that the massive and imperishable portions of the structure have wholly disappeared, apparently by sinkage. The wooden parts, the roof, the floor, etc., have been burnt or have decayed, as the case may be, and all that is left at present to tell the story of the palace is the disjecta membra of its ruin and the singular stratigraphical indications of the soil. Evidences of this nature are not easy to observe. They are more difficult to co-ordinate, and still more so to elucidate connectedly. This must be my excuse for not having gained a larger finality of judgment, with the men and money at my disposal; but the following pages will show that substantial progress has been made, even now.

It will be seen that the tangible evidences from which my deductions are drawn are very few. But it should be understood that stratigraphical evidences cannot lie, and that by careful observation and scrupulous tabulation they can be made to yield almost as certain information as to the nature of a structure as actual remnants of the same When we find, for example, that heaps of pillar fragments lie in rows at regular intervals across the site; that underneath these heaps of stone, descending tubular holes occur, filled from above; that these holes are always round in plan, of fixed diameter, and regularly spaced, we see as clearly that rows of columns originally stood at these particular points as though we actually had the pillars in position. It is by following methods such as these that I have derived that information which is the basis of my present inquiry. The data are at least definite and accurate. But whether my interpretation of them is the one and only right one must be left to the future to determine. One object in this paper is to make them seem more reasonable.

The starting-point for our deductions is the ground plan of the building under excavation. By the end of the first season we had located eight rows of monolithic polished pillars, with at least ten pillars in each row. For reasons we need not here discuss, one of these pillars was found to have escaped the general fate of sinkage, and this one was recovered. From it exact measurements have been determined, which have introduced an element of real precision into the study; and this has enabled me to deal with the nature and design of the palace in a manner much more satisfactory than would otherwise have been

possible at this stage. We see now, for example, that the building consisted of a vast pillared hall, presumably square, with stone columns arranged in square bays over the entire area, placed at distances of 15 feet, or ten Mauryan cubits, each from each. This much alone disclosed the fact that the building was unparalleled in ancient India. Square halls with multiple rows of pillars in square bays are commonplaces in modern Indian architecture, but the really ancient period has hitherto had none to show.

The mere fact that our building seemed unique might never have led us to the right clue for its interpretation had foreign influence in Mauryan times not been established theretofore. But it has been known for years that Aśoka's edicts echo the great Darius's, that the style of his sculptured capitals originated in Persepolis, and it had been inferred, by Dr. Marshall in particular from the Sarnath capital, that Mauryan stonework had been wrought by foreign masons. When, then, the plan of our building seemed to be so clearly un-Indian, while our columns showed the peculiar Persian polish, it seemed to me not impossible that even in its design the building might have been under Persian influence. My wife was sure that she remembered something of the sort among the pictures of Persepolis, and her optimism finally induced me to search among the records of that site.

I did not have far to look. The so-called Hall of a Hundred Columns at Persepolis, the throne-room of Darius Hystaspes, afforded a sufficiently striking parallel to our structure at first glance. It was a square hall, with ten rows of ten columns, evenly spaced in square bays. At Pataliputra, to be sure, we had only eight rows, but there was every reason to suppose that others would be found, and possibly evidence for a porch as well, to correspond with the porch in Persepolis on the north side of the throne-room. Our orientation appeared to be

correct. Nay, more, the one big column which we had recovered showed a mason's mark of curious type, which seemed extremely similar to a mason's mark familiar at Persepolis. The form was not identical, perhaps, but the resemblance was nevertheless unmistakable and very striking. This, then, was satisfactory, and I was encouraged to look more closely into the details of the two buildings. On so doing I found that Darius's columns were ten Persian cubits apart. The Mauryan columns are ten Indian cubits apart. Did this imply identity of scale? It seemed to, although there was still the outstanding possibility that the two structures had been of the same size, and that the difference between the two cubits had been equalized by using more pillars in the Indian hall. The intercolumniation at Kumrahar was found to be five diameters; an intercolumniation not identical, perhaps. with that of the Persian throne-room, but still one which is essentially Persepolitan, and never found, so far as 1 am aware, in any other country of antiquity. No capitals had been recovered in Patna to help us in comparing the two buildings, nor had any pedestals been met with. a careful study of the stratification suggested that pedestals had, in all probability, existed in our hall, and the indicated dimensions and proportions justified the thought that these pedestals must have been themselves of Persepolitan type. round in plan, some 3 feet high, and, inferentially, bellshaped, though as regards this latter point no evidence exists.

Other points of seeming similarity between the Mauryan hall and its suspected Achæmenian prototype were also found, but a discussion of them is unnecessary in this paper. Enough has been said already to explain why it seemed to me reasonable to assume, as a working hypothesis for the conduct of my future operations, that the structure under excavation really did betray strong Achæmenian influence, and that indeed it looked, ab even

that early stage of the work, curiously like a copy of the Persian hall.

But, if we were justified in assuming, even tentatively that the throne-room of Darius was really the prototype of this Mauryan palace, the question then arose, what about those other palaces associated with the throne-room at Persepolis? There the throne-room is only one of a large complex of halls and porticoes. Was it conceivable that the Mauryans should have copied the whole design? certainly was not conceivable that the hall we were excavating could have stood in splendid isolation. There must have been other buildings associated with it. they not have reflected the Achæmenian grouping, after all? At any rate, it could do no harm to look and see if there were surface indications at the appropriate points. In order to do this I took Lord Curzon's plan of Persepolis, marked out the south-west corner of our pillared hall as closely as was possible at that time, and started out through the jungle with tape and compass.

The whole story of that wonderful day cannot be given It will be found in my Annual Report for 1913-14. But here it will suffice to record that the results of that exploration were fairly astounding.

At a point almost precisely corresponding to the position of the House of Xerxes (Lord Curzon's" S.E. Edifice") I discovered a mound which was correct in form and orientation. This lay south of the pillared hall, or rather south-west. and its corners, being square, showed that it could not mark the site of any early stupa. Now north-west of this position in Persepolis lies the Palace of Darius. On proceeding in this direction for a suitable distance, a further mound appeared, which corresponded with startling accuracy to the monument in the similar position at Persepolis. The outline of this mound, its orientation, its configuration, and its bearing from the other sites, all seemed in perfect harmony with our theory. Nay, I was also able to

determine that all these mounds, etc., lay on a well-defined raised area, with a sharply marked edge which counterfeited curiously the edge of the artificial terrace at Persepolis, not only in bearing and extent, but even as regards the south-west angle. The whole plateau appeared to have been once surrounded by a most. This seemed to imply a Mauryan copy of the entire Persepolitan design in all its main essentials. There were even ridges and other minor indications at other points corresponding to further members of the Achæmenian group of structures; but these were less conclusive than the main mounds, and their significance was uncertain. Enough was clear, however, to show us that not only was our original pillared hall strongly reminiscent of the Persian throne-room even in matters of detail, but that its surroundings also showed a parallelism to the Achæmenian site which could not possibly be explained except by the assumption that the one reflected the other definitely.

No certainty, of course, could be attained until further excavations could be carried out. Concrete evidences must be found, inscriptional or otherwise, before we can determine the question finally. But I was forced to conclude either that we had the most extraordinary chapter of accidents known to archæology, or that we had a conscious Mauryan copy of Persepolis. The latter assumption seemed more probable. And yet, when I stopped to ask myself what such a Mauryan replica of Persepolis would mean, and to consider all that such a thing must seemingly imply, I was not altogether sure at first that such a theory would be really tenable. Did it appear consistent with existing knowledge?

It remains doubtful whether the purely monumental evidences previously known in India would warrant an affirmative answer to this question. It has for many years been recognized that Persian influence did indeed exist in India, although the extent of this influence was

undetermined. Mr. Kennedy, writing in the Journal of the Royal Asiatic Society sixteen years ago,1 recognized Persepolis as the channel for most Assyrian forms in India, and stated that, however indigenous the elementary conceptions of art and architecture may have been, "there was abundant scope for the borrowing of detail; and, as a matter of fact," he adds, "most of the details were borrowed from Persia." And yet neither Mr. Kennedy nor, before him, Professor Grünwedel could adduce much as extant and tangible except a few Asokan capitals, a few Persepolitan pilasters, and isolated Persian or Assyrian motife as concrete evidence, beside the Asoka inscriptions, for that influence that, none the less, they rightly predicated. Grtinwedel declared that all the important monuments of really ancient India which have been preserved show undoubted Persian influence in their style. But he was forced to admit that "this Persian style . . . is unfortunately represented only by a few monuments upon which it is almost impossible to pronounce judgement".2

But does this mean that really very little Persian influence is traceable in early India? And, just because few monuments can be adduced to prove the point, are we to hold that theories of large influence are untenable? By no means. We know that Darius counted India among his provinces, although the extent of his dominions in this country is unknown, and Bühler endorsed the ascription of the Kharoshthi system of writing to the Aramaic clorks of Achsomenian rule. These facts alone justify Grünwedel and would render plausible enough an assumption of large Persian influence in early days, even had we no shred of other evidence at all. But, when we come to the Asoka period and find his edicts echoing

¹ Cf. JBAS., April, 1898, p. 283.

Of. Grünwedel, Buddhistische Kunst in Indien (1st ed., Berlin, 1893), p. 17; Grünwedel & Burgess, Buddhist Art in India, p. 17.

Darius's: when Dr. Marshall tells us his columns and his capitals were wrought by Greco-Persian masons; when Dr. Thomas shows us how we must look to the façade of Darius's tomb to realize how the Mathura Lion Capital fitted into place, we surely see that Persian influence in early India is no hypothesis at all. The only mystery is that monumental evidences are so few.

It may be true that, so far as Indian architecture is concerned, the only substantial point showing Persian influence is the capital. It may be true that no architectural plan in India, nor any type of building, as a whole, has hitherto been known which one could say was based directly on a Persian model. But these facts do not militate against our theory seriously, nor render our suggested interpretation of the archeological indications at Kumrahar at all unplausible, as they show us that Persian influence ought to be traceable in India more largely than it is. But our case is even stronger, for these evidences do not stand alone. There is fortunately a certain body of literature also available, in conjunction with which our other data gain greatly in cohesion and significance.

Megasthenes will bear us testimony that the Indian Court was almost wholly Persian in his day. Mr. Vincent Smith has brought together the details in his invaluable History, and the picture which he paints for us of Chandragupta's Court is Achsemenian in every line and tint. By far the strongest of the evidences named above are obviously those for the Asokan period. When the edict pillars of Asoka testify to Persian influence, not by their style alone, but by their substance and their very script, it is clear that he, at least, drew definitely on the West for inspiration. Without Megasthenes, however, the

According to Fergusson the most Persepolitan of all Indian capitals are those in the comparatively late caves of Bedea; of. Indian and Bastern Architecture, 2nd ed., vol. i, p. 138.

fact could seem an isolated one, a personal predilection, possibly of the individual, not of itself involving necessarily any subservience to Persian culture on the part of either Court or country, and, indeed, restricted largely, so it might have seemed, to the one domain of royal proclamations. Megasthenes shows us that this was not the case, and teaches us that in this turning to the West for inspiration Asoka made, his self, no new departure, but merely followed in a cour inaugurated by his grandfather, and thus familiar to the dynasty as Indeed, considering what the classic authors say, it is apparent that in the earlier days Persian influence at the Mauryan Court was, if anything, stronger than has hitherto been evidenced for later times. We know, however, that even in Asoka's reign the Viceroy in the west of his dominions was an actual Persian named Tushaspa, and it is believed that the famous waterworks he carried out were copies of the Babylonian. But for Chandragupta's time the evidences are more numerous and more detailed, and indicate a following of Persian customs all along the line-in public works, in ceremonial, in penal institutions, everything.

Here, then, we find an atmosphere indeed congenial to our postulate. At a Court where the Indian monarch washed his royal hair according to the Persian calendar, and built the royal highway from his palace in imitation of Darius's, his palaces themselves may very well have been as imitative as the royal road. We therefore need no longer hesitate to give our archæological evidences at Kumrahar their full face value. Far from being opposed to our existing knowledge, they merely supplement and complete it, uniting previous scraps of information into a consistent and harmonious whole, and showing us upon the threshold of the historical period a dynasty of almost purely Persian type—how purely Persian we shall see as we go on. The only loss involved, if this be so, concerns

Aśoka. He has hitherto been credited with having introduced the use of stone, and Greeks have shared with Persian the honour of inspiring him. But is there any trace of Greek influence at Chandragupta's Court in all the records of Megasthenes? A Greek himself, Megasthenes would surely not have failed to boast of his own nation's influence at a foreign Court which he openly admired, had such existed. But this he most conspicuously fails to do. The inference is thus warranted that any Greek touches we may trace in Piyadasi's reign are later in their origin, and possibly of Bactrian provenance—a view, I think, which Dr. Marshall holds. For Chandragupta's time the evidences point to Persia only.

But then the question arises, is Megasthenes admissible as evidence for any structures yet discovered at Kumrahar? If these are of Asokan origin, Megasthenes may not be strictly relevant, as all his words relate to edifices older than Asoka by two generations, and generations, too, which must have witnessed strides in all directions, as the Mauryan empire settled to solidity. To justify reliance on Megasthenes as really relevant to my contention, I must refer to Chinese sources.

In Fa Hien one sentence in particular has obvious bearing. In describing how the genii had built Aśoka's "halls and palaces", he says, "piled up the stones and raised the walls and gates" (lci shih ch'i ch'inng ch'iteh, 果石起糖锅).¹ This must, with certainty, refer to walls of stone, and the testimony is more valuable as Fa Hien describes what he himself had actually beheld. The description, however, is inapplicable to the structures under excavation at Kumrahar. These, so far as can be judged, were wholly built of wood. Possibly portions were made of brick, but stone was used sparingly, for certain features only. What Fa Hien describes is real

¹ Legge, Record of Buddhistic Kingdoms, trans., p. 77; text, p. 二十元.

stone architecture of developed type. At Kumrahar what we see is the first use of dressed stone for building purposes, where stone is still subordinate to wood, and largely restricted to columnar use, and use in decorative adjuncts to the structure. The architectural stage appears essentially an older one.

But let us note that, although Fa Hien's description of Asoka's palaces would make it difficult, if not impossible, to assign our new-found monuments to this emperor, it is nevertheless in no way inappropriate to a Persian palace, or rather, I might say, it seems of singular propriety for buildings of the Persian type specifically. Not only did the genii pile up the stones to build the walls and gates: they further executed, as Legge puts it, "the elegant carving and inlaid sculpture work . . . which no human hands of this world could accomplish." 1 These words are surely apt enough in application to the palaces of Darius or of Xerxes, with their vast sculptured stylobates of stone, even if we do not press the "inlaid sculpture work". I do not know, myself, exactly what these words imply. The Chinese text says only ko lou, 刻 盤, which Giles explains 2 as (a) " to cut into", (b) " to carve, engrave", or. both combined, as equal to "inlay". The thought lies near at hand that what the pilgrim really means are figural mosaics of glazed brick, like those of Susa.3 If this is really so, the Persian nature of even Aśoka's palace is assured indeed. However that may be, and whether Fa Hien be taken as implying Persian influence in Asoka's palaces or not, he certainly cannot be quoted in support of any ascription to Asoka of our buildings at Kumrahar, so far as present indications go.

Nor can Hinen Thsang. He tells us little of the nature of the Asokan Monuments, but fortunately one passage

¹ Legge, Record of Buddhistic Kingdoms, trans.; p. 77.

² Dictionary numbers 6099 and 7354.

^{*} Cf. the Lion Frieze and the Frieze of Archers pictured by Perrot and Chipies against p. 420 of their History of Art in Persis, English trans-

may be noted which bears significantly on the question of topography. After mentioning the "old palace", which to my mind, means Asoka's palace inferentially, and having dealt successively with all the sites of interest lying to the north, the pilgrim, standing at the palace as his centre, turns him then towards the group of stupes now identified with Panch Pahari. In one straight line with these apparently, and somewhere midway between them and the palace itself, he notes the presence of an ancient terrace beside a little hill of stone. The passage has been variously rendered, and seems to have been of vague significance to most translators. Beal calls it not a terrace, but a tower; but Watters must be right in using "terrace" to interpret tai, 2. Both he and Beal, however, then assert that of the tower, or of this terrace, the stone foundations were still traceable. But is this consonant with what is known of Pataliputran archaelogy? Such foundations as have hitherto been met with in this city are of wood, and wooden palisades are attested both by the Eukiron mepisodor of Megasthenes, and by considerable stretches actually recovered here and there in Patna to confirm the Greek. If any terrace did exist, we may feel sure that its foundations were of wood. Chinese text thus seems to me to demand a different rendering. The original 1 reads: pang yu ku tai; yü chi chi shih ; ch'ili chao lien i, 傍 有 故 基。 餘 基 雜 石。 触 沼 跳 路。 Word for word this may be rendered, "beside [the small stony hill], there is, old, terrace : extant, foundations, heaps, stones; ponds, pools, flowing water, ripples." In view, therefore, of what actually meets the eye at Pataliputra, I propose to interpret this to mean that by the side of the little hill aforementioned there was an ancient terrace, upon which still existed old foundations and heaps of stone debris, together with

¹ Kyöto edition, vol. ii, book viii, p. 10, last line; Beal, Buddhist Records, etc., vol. ii, p. 95.

tanks of rippling water. From the archaeological point of view this is a rendering considerably more probable than any hitherto advanced. It literally and with accuracy describes the terrace now discovered, whereon tanks and old foundations must indeed have been traceable in Hiuen Thang's time. I have, therefore, no hesitation in advancing this version of the text, and applying it to the site of Mr. Tata's excavations.

The bearing from Panch Paharl is, he wer, incorrect as stated in the Chinese, where all the manuscripts collated for the Kyöto edition (kindly sent me by my former guru, Dr. Takakusu) place both the terrace and the stupas south-west of the old palace.1 But as no one. so far as I can remember, has ever sought to place the palace north-east of Panch Pahari, and as the places mentioned by Hiuen Thsang as lying to the north were sought by Colonel Waddell generally to the worth-west of the Kumrahar site, the single character involved seems open to suspicion. Panch Pahari is definitely south-east of both our terrace and any probable location for Asoka's palace, and instead of hei nan, E #, "south-west." we presumably must read tung nan, * ** south-east." At all events, even putting aside this suggested alteration of a single character, and one relating only to that most readily mistaken of all vocables, the cardinal points, it is to my mind certain that the pilgrim is referring to our terrace at Kumrahar, and equally certain that he differentiates it from Asoka's palace. Thus both our Chinese authors seem to indicate that our remains are not those of the Asokan palaces. That they are not of later date is obvious from the monuments themselves. We therefore must assign them either to Bindusara or to 'Chandragupta, and the relevancy of Megasthenes is manifest in either case.

Watters' rendering of *** 2**, ku kung, by "old city" seems to me indefensible.

If, then, the ascription of these buildings to the earliest Mauryan times is justified, and they themselves seem striving to proclaim their Persian character, the harmony between our archaeological evidences and our Greek historians would seem complete. If to all this there can be added evidence from Indian literary sources tending to prove the existence of Persian buildings at this period, the chain of testimony will be all that could be wished, and the probability of Achamenian dominance in Mauryan architecture be raised to very near a certainty. Our first inquiry in this paper, therefore, must be into the Indian evidences on this architectural point.

I had not, myself, expected any Indian documents to shed light upon the question. I must therefore thank Professor Jacobi for suggesting that perhaps the Mahabharata might have some bearing on the problem. The hint has proved a clue to veins of rich suggestiveness. The first thing to catch my eye on following this distinguished scholar's counsel was a paragraph in Hopkins's Great Epic. On p. 391, where he discusses the age of the Mahabharata, we read: "More important than this evidence [of Buddhist philosophy, etc.] is the architecture, which is of stone and metal and is attributed in all the more important building operations to the demon Asura or Danava Maya, who by his magic power builds such huge buildings as are described, immense moated palaces with arches, and a roof supported by a thousand columns."

These words reminded me at once of the moated monuments whose buried vestiges I had been privileged to find; and when so many and so varied reasons existed for believing them to be of Persian character, actually constructed by imported Persian masons (for have we not a Persian mason's mark on our big column?), the ascription in the Mahābhārata of structures such as these to one Asura Maya leapt into instant meaning as an echo

of Ahura Mazda. Every detail that I have subsequently ascertained has tended to confirm this supposition. The Sanskrit text appears to me directly applicable to structures of the type recovered at Kumrahar, and as these, from all the evidences, are of Persian type, and those are openly ascribed to superhuman agency in the person of the Asura Maya, it would seem to me that all our streams of evidence converge harmon wouldy, and that the Asura Maya really means Ahura Mazaka

In making this statement I do not wish to be misunderstood as implying that Maya is, or could be, any Indian cognate equivalent of Mazda. The Indian cognate. Dr. Thomas tells me, is medha, What I do mean is, that when the use of dressed stone for building purposes was first introduced into India by the Mauryas, through the instrumentality of imported Persian masons, these builders. being of Zoroastrian faith and accustomed to ascribe their works to the grace of Ahura Mazda, made this name familiar to the Indian population in this connexion specifically. As these buildings were, to the Indian mind, of supernatural grandeur and elegance, there gradually grew up the belief that Ahura Mazda was the actual builder of them. The name, however, remained at all times a foreign one, and, like all other foreign names in India, was pronounced by the people in an approximate form only.

The equation of Asura with Ahura needs no defence. That much is palpable enough. Nor does the equation of Maya with Mazda involve any serious difficulties. It is well known that foreign sounds represented in English

As regards Weber's "Vermuthung" that the Asura Maya is to be identified with Ptolemaios, all I need say is that the suggestion seems to me wholly unsupported. But Weber's remark, "dass wir unter Danayas and Asuras hands going from Volker an verstehen haben," and his contention that Maya was originally of foreign origin are both allie serviceable for my own argument. Ct. Inc. Mad. it, 243, and Abud. Vorteamper abor Ind. Literaturysechichte, p. 225.

by j or z or zh both were and are commonly transcribed in India with a y, as in the case of Azov and Ayasa, where we may be sure that the y was pronounced with a sound near to the French j, as is indeed the case in many parts of India to-day. This, then, justifies us in re-writing the form Asara Maya as Asara Maja, and the closeness of this to Ahara Mazda thus becomes apparent. Given Ahara Mazda in the mouths of imported masons, Asara Maya, with a j sound, is what might normally have been expected as the Indianized form of the name.

The association of the Asura Maya, thus derived, with architectural works in particular, is largely explained by what has already been said. But I would go even further than this, and would affirm that this is in entire accord with Persepolitan usage. Compare, for example, the epigraph on the great Porch of Xerxes, as rendered by Lord Curzon in his Persia (vol. ii, p. 156): "A great god is Ormuzd, who hath created the earth, who hath created the heavens, who hath created man... Xerxes the Great King saith; by the grace of Ormuzd I have made this portal... Many other noble monuments there are in this Parsa, which I have wrought and which my father hath wrought. That which hath been wrought is good. All of it we have wrought by the grace of Ormuzd ..."

It may be true that neither in this epigraph nor in Persia generally was Ahura Masda looked upon, in Achamenian times, as the literal builder. But neither need we suppose that in the days of the Mauryas the Asura Maya was so looked upon, either. The conception of the Asura Maya as an active architect is an essentially later development, which presumably took place as Persepolitan architecture waned in India, and such palaces as the Mauryas had constructed came to seem more and more superhuman to the feebler generations which succeeded.

This seems to me to provide us at last with a true historical generic for the belief that the Mauryan halls

and palaces were erected by the genii. Both Fa Hien and Hiuen Thsang state the fact, and what more natural background for their kuci shen, *** *** *** *** *** *** than this very Asura Maya of the texts? But we need hardly imagine that Chandragupta looked upon the Asura Maya as an architect, any more than that Aśoka supposed his palaces were built by genii.

It is also true, of course, that in Persia itself Ahura Mazda, being the Great Spirit and Creator, was not necessarily more closely connected with architecture than with other human undertakings. Presumably he was always invoked in every work man undertook, and all that mankind wrought at all was "wrought by the grace of Ormuzd". But in India, supposing such invocation and such ascription limited to a body of foreigners, and specifically to a body of stone-masons, the more restricted association of his name with architecture is but natural. That is to say, we should have had no legitimate grounds for surprise had we found the Indian counterpart of Ahura Mazda strictly and absolutely limited to architecture in the popular mind. But, as a matter of fact, this happens not to be the case. Even in India the originally broader character of the Asura Maya is still traceable. He is more than a mere architect, even here.

to the wonder-working priesthood of the Magi? And is not the great Ishtar, perhaps the most popular divinity among the Persians, peculiarly associated with these very Asuras or Dānavas? Witness the compounds asuraguru, "teacher of the Asuras," and dānavapājita, "worshipped by the Dānavas," both of which are Sanskrit names for Venus, well-attested.

So far as general character is concerned, therefore, the parallelism between the Asura Maya and Ahura Mazda is all that one could wish. Nay, more, unless I am mistaken, one line in the Mahabharata is tantamount to a direct asseveration of the identity proposed. For do we not read in MBh., book ii, 1,

षष्टं हि विषयसमी वै दानवानां महासविः

Mahākaci. I would point out, is not altogether easy in this line, if taken in the ordinary Indian sense. Maya was certainly not a "great poet". But kuvi as a technical Zoroastrian term is quite harmonious to the character of Maya as I interpret it, and we can read the line most readily with both this term and Višrakarmā in the Magian sense—

"For I am the creator, the great Kavi of the Dânavas." Could Maya state identity with Ormuzd in clearer terms!

Turning now to the actual structures with which Maya is associated in the Mahābhārata, the first question to be considered is, do these buildings show any peculiarly Persian features? Are they pronouncedly Achemenian palaces or are they merely ordinary Indian buildingson an increased scale? To this question it would not hitherto have been easy to give any categorical answer. But that they are not merely ordinary Indian buildings on a poetically exaggerated scale is sufficiently clear from the fact that nowhere in ancient India has anything of the type described in the Mahābhārata been met with, prior to the excavations of Paṭaliputra. If, therefore, it can be shown

that Chandragupta Maurya did indeed erect structures for which the Mahabhatrata text would furnish an acceptable description, it will follow, from the evidences named above, that the structures credited to Maya in the Epic were really palaces of Persian type. For it would be difficult indeed to deny the Persian character of the monuments now located in Patna.

We cannot consider the question adequately without a detailed reference to the Sanskrit text. The first passage I wish to consider is MBh. ii, I. 14-17, when reads as follows:—

दानवानां पुरा पार्थ प्रासादा हि मया कताः ॥
रम्याति मुखनभौति भोगाद्यानि सहस्रशः ।
उद्यानानि च रम्याति सरासि विविधानि च ॥
विविचाति च वस्त्राति कामगानि रचानि च ।
नगराति विश्वानानि साहुप्राकारवन्ति च ॥
वाहनानि च मुख्यानि विचिचाति सहस्रशः ।
विकानि रमसीयानि सुख्युक्तानि वे भृश्म ॥
सति क्रता मया सर्वे . . .

Here Maya himself is giving to Arjuna a catalogue, as it were, of all the wondrous things that he had fashioned. I translate: "Aforetimes, Partha, the palaces of the Danavas were wrought by me; pavilions full of pleasures and abounding in delights a thousandfold; delightful gardens, too, and ponds of various kinds; and wondrous vestments, chariots that movid at will, and cities far extended, with high rampart walls: also thousands of wondrous vehicles most excellent, and pleasing caves to every comfort joined. All these by me were wrought."

Are splendid palaces, pavilions, pleasure gardens, fancy ponds, and wondrous vestments such things as one would naturally expect to find predicated of the aboriginal tribes, as the Asuras are called, and cities stretching far

¹ Cf. Fausboll's Indian Mythology, p. 1, and again p. 41.

and wide with lofty ramparts? Certainly not. Neither have we any specific evidence for them as every-day occurrences among the Hindus at any early period, save one. Indeed, that they were not commonplaces is sufficiently clear from the Epic ascription to supernatural power. One does not invoke the genii to explain the matter-of-course.

But there is one period of Indian history and one Indian Court where definite evidence exists for just these things. I quote Vincent Smith's Early History, which says1: "The buildings [of Chandragupta's Court] stood in an extensive park, studded with fish-ponds and furnished with a great variety of ornamental trees and shrubs . . . gorgeous embroidered robes were to be seen in profusion. and contributed to the brilliancy of the public ceremonies. When the King condescended to show himself in public on state occasions, he was carried in a golden palanquin, adorned with tassels of pearls, and was clothed in fine muslin embroidered with purple and gold" Does not this English quotation from Curtius and Strabo sound curiously like the Mahabharata? The gorgeous palaces, the stretching city, and the lofty ramparts of Pataliputra are also all more than adequately attested by Megasthenes. Thus really everything included by Mays in this inventory of his works is specifically evidenced for the Court of Chandragupta, except the caves. As regards these, however, let me note that, in the little artificial hill beside the terrace which Hiven Thsang tells of, the pilgrim makes particular mention of shu shih shih, 數十石 章, "several tens of stone chambers," which are palpable caves.2

In the natural hill east of the Persepolitan terrace are also caves, namely the royal tombs. The connecting link we owe to Dr. Marshall. He, studying afresh the oldest

¹ First edition, p. 115.

² Cf. Watters, op. cit., vol. ii, p. 95.

caves in India, the Mauryan caves in the Barábar Hills, near Gayā, came to the conclusion, some months prior to my discovery of the terrace at Kumrahar, that the men who fashioned them betrayed familiarity with just these royal rock-cut tombs of Achamenian Persia. Could better or more independent proof be wished? We have thus found some record for the existence at Pāṭaliputra of each and every thing in Maya's list, and some of these, the caves particularly, are known to have been exclusively of Persian character. This passage alone would almost warrant an equation between the Asura Maya and Ahura Mazda. But let us continue our examination of the Epic text, for now we come to passages of special interest and significance, in this same canto.

Maya has hitherto been pressing for permission to construct something for Arjuna to show his gratitude to him for having saved his (Maya's) life. There is possibly some historical allusion behind this also, if our knowledge were but adequate; but let it pass. Arjuna has declined the offer, so far as he is himself concerned, but ultimately yields to Maya's importunities to the extent of bidding him build something fine for Krishna. Krishna himself decides on a Sabha—a Durbar Hall, or throne-room, we should say—and proceeds then to define his wishes in a vague and general way. He stipulates for a wondrous hall, one that no mortals could essay to imitate, one

चष दिखानभिमाचान् पश्चिम विदितांस्वया । चासुराचानुवांचैव तावृत्तीं सुव वे सभाम् ॥

The interpretation of these words appears to me not easy. I cannot read them satisfactorily with any of the accepted meanings of abhiprayah. How could any divine "intentions" or "purposes" be so "wrought" by Maya as to be literally "seen" in the Sabha? The difficulty is increased if these "intentions" are to be, not only divine.

but also such as appertain to Asuras and to mankind. It would seem to me that the word abhiprayah must contain some special meaning here, one perhaps long since forgotten. None of the meanings given in the lexicons accessible to me seem suitable, as not a single one is lucid or makes sense if taken literally.

But let us remember that Vi with abhi-pra means "to go near to", "to approach", and then particularly, to approach with one's mind". Does this not lead us legitimately to the idea of conception, in, let us say, the artistic sense? "Where we may see the conceptions of the gods and Asuras and men which thou hast formed" would appear a fairly literal and satisfactory rendering. In ultimate purport we might put it freely: "Where we may look on concepts of the gods, of Asuras and men which thou hast fashioned, a hall of this sort, prithee, build!" Roy has employed the word "design" in this passage. This is perhaps acceptable; but we may, for all that, be permitted to wonder in what sense he used the word. Abhiprayah in the meaning "artistic design, pattern figure" does not appear to have been recorded. But the extension is a natural one, in Sanskrit as in English, and I do not doubt but that we have this extended meaning here. But I do doubt if Roy intended so to use the word.1 The reference appears to be to statuary, sculptured representations of figures divine, semi-divine, and human -thus providing an interesting sidelight on the still open question whether divine figures were sculptured in India previous to the Gandhara school!

But can support be found for this proposed translation? I think it can, and to this end would cite the passage ii, 3. 31. Here the very hall for which Krishna is, as it

¹ Since writing the above I find that Böhtlingk on p. 1022 of his Dictionary, vol. v, among the addenda to W, records abhiprays in the sense of "Erscheinung, Phantom", with reference to M.Bh. 13. 2827, tatra divyda abhipraysa dadaris, which is gratifying confirmation of my views.

were, giving his specifications in the previous passage, has been completed, and the text declares—

तां सात्र मधेनोत्ता रचनित च वहन्ति च। सभामडी सहसासि सिञ्चरा नाम राचसाः ॥

"There, by Mays bidden, eight thousand of the Rakshassa called Kinkaras did guard the hall and did uphold it.

And again, in the passage ii, 10. 3, the Sabhā of Kubera is described as

नुस्विद्यामाना

" Upheld by Guhyakas."

Into association with these two citations I should like to bring the passage ii, 11. 14 ff. The South Indian text as published in Bombay reads thus:—

सक्षिनं च भूता सा तु शावती न च सा चरा ॥ १४ ॥ द्विनांनाविधेभांविभांसक्किर्मितप्रभैः ॥ १९ ॥ चित चन्द्रं च सूर्वं च शिखिनं च खबंप्रभा । दीखते नावपृष्ठका भर्त्यनीन भास्कर्म् ॥ १६ ॥

Roy translates this as follows: "It doth not seem to be supported on columns. It knoweth no deterioration, being eternal. That self-effulgent mansion, by its numerous blazing celestial indications of unrivalled splendour, seems to surpass the moon, the sun, and the fire. Stationed in heaven, it blazes forth as if censuring the maker of the day." I must confess that this does not appear to me specially coherent, although Fausböll quotes it with seeming approval.\(^1\) What precisely does "blazing celestial indications" mean? What is the connexion between the statements "it doth not seem to be supported on columns" and "it knoweth no deterioration, being eternal\(^2\)? And does not Roy's rendering ignore the tu and disregard the construction with it?

Indian Mythology, p. 73.

Fausböil's approval makes me hesitate, because I naturally dislike to challenge an interpretation accepted by so great a scholar; but I cannot avoid the suspicion that the text is here corrupt. A really critical edition of the Mahabharata would, I feel sure, show us the pada salvati na ca sa kshara placed differently, probably in closer association with the line at candram, etc., where it would appear more relevant. That something has gone wrong with the text is even externally indicated by the fact that stanza 15 shows only one line. Something has apparently got left out, and the attents, etc., padu has got misplaced. It appears to me that the stambhair na cu dhrita sa tu must be brought into connexion with the instrumental cases in that single line which now figures as stanza 15, and that in the absence of our missing pāda we should read stambhair na ca dhrità sá tu diryair na navidhair bharair bhanadbhir amitaprabhaih consecutively.

For the interpretation of this altered text I need only state that among the meanings of bhave we find "a being". "a living creature". A being in the sense of bodily form or shape is evidently what we need, and thus I take the passage to mean: "And neither is it upheld by columns. but by divers radiant heavenly beings of unequalled splendour." This brings me to my synthesis of all these passages. I take the poet to be referring, in all alike, to a type of throne-room or Sabha familiar to his contemporaries, but now lost to human memory, in which the actual pillars, as merely structural necessities, were lost to the consciousness of the beholder by reason of his absorption in the symbolism of a different and more conspicuous feature. This feature was the literal presence of innumerable large sculptured representations of divine and semi-divine beings, so sculptured and disposed as to impress the beholder as actually supporting, on their upstretched arms, the various floors of the Sabhā, thus

justifying the description of the poet, rakshanti ca vahanti ca, where weah has its simplest and most natural meaning of "bearing", or "upholding", literally.

It became, then, a matter of the utmost importance for my present thesis to observe that for tangible historical evidence for such a structure as the Mahabharala describes we must have recourse to Persepolis. Nowhere in ancient India has there hitherto been any indication of a structure of this type. But on the sculptured face of the tomb of Darius Hystaspes, and, in abbreviated form, at the entrance, significantly enough, to his Sabha, we see depicted a structure which in all ways precisely illustrates the meaning of the Indian Epic. This structure is the so-called Talar, an open, manystoried platform serving as a support to the throne, in which the several floors are apparently upheld by sculptured hosts representing, in this case, the nations subject to the King of kings, 1 It is the most striking sculpture at Persepolis, as it embodies a conception of astounding boldness and of magnificently imperial pomp and pride. The bas-reliefs display this conception in pictorial form, and in the absence of tangible evidences it is not strange that Persian archeologists have failed to follow so lofty a flight of the imperial Achæmenian mind, and have missed the actual existence at Persepolis of this Talar in structural form. Fergusson had the idea almost within his grasp, but he missed it by conceiving the Hall of a Hundred Columns to be merely a hall to support a Talar on its roof.2 Even this conception has met with criticism, as partaking of the fanciful. But evidence has

¹ For illustrations of Curzon's Persia, vol. ii, p. 183, and again p. 176; Perrot & Chipies, History of Art in Persia (Eng. trans.; p. 218, and again p. 396; Fergusson's Palaces of Ninerh and Persepulis, p. 181, and again p. 124; Stolze & Andreas's Persepulis, vol. ii, pll. 106-8, and vol. i, pll. 59, 60. The plate in Perrot & Chipies is perhaps the best.

² Palaces of Nineveh and Persepolis, p. 180.

been found at last, for believing not alone that the roof of Darius's throne-room did indeed sustain such a Talar, but that, moreover, the whole "hall" itself was such a Talar, on a colossal scale. The architectural monstrosity of a hall covering fifty thousand square feet of area internally, with an estimated height of only 25 or 30 feet, and no means of lighting, thus gives way before an architectural conception of surpassing grandeur.

And when I state that the evidence on which this altered restoration of Darius's throne-room is based has come from the stratification of Pāṭaliputra, and that the first Indian example of those peculiar edifices described in the Mahabharata occurs among the palaces of Chandragupts Maurya at Kumrahar, which in other respects are described by the Greek historians in language almost identical with the Mahābharata account of Maya's works, I trust that I am justified in stating with some confidence that the Asura Maya of India is indeed a reflex of the great Ahura Mazda.

(To be continued.)

A KHAROSTHI INSCRIPTION

By F. W. THOMAS

ON p. 111 of Ariana Antiqua, under the heading "Tope No. 13 of Hidda", we read as follows: "This tope is situated on the brink of a water-course, more than a mile from the village of Hidda. In our progress towards the centre we fell upon a small earthen jar, enclosing a stone wrapped in tuz-leaves. This simple deposit was perhaps the most useful that any of the many topes examined had yielded, for it was encompassed with a Bactro-Pali inscription, written with a pen, but very carelessly. Fearful that this testimony might become obliterated, or suffer in its journey from Kabul, I copied it at the time as well as I could, under the hope that, if necessary, a transcript would be serviceable." Other references to the same find may be seen on pp. 60, 113, and 258-9.

This was not the only occasion when Masson discovered in topes which he excavated fragments or rolls of tuz leaves, as he calls them, meaning birch-bark (see pp. 59-60, 84, 94, 116 of the same work). In some cases the rolls or "twists" were inscribed with Kharosthi characters; and it is specially unfortunate that they proved too brittle for preservation, since they would have been undoubtedly the oldest surviving specimens of Indian MSS.

To the inscription on the jar my attention was first drawn some years ago by finding among the fragmentary papers of Masson in the India Office Library (doubtless remains of the material from which Ariana Antiqua was compiled by Wilson) a number of attempts at decipherment of one or two Kharoethi inscriptions. Among them are the Māṇikiāla inscription and others which are quite

well known. Upon a re-examination about a year ago it appeared that there was one inscription which was not familiar, and I ultimately concluded that it had never been published. Although this was not the fact, it was not very far removed from fact: the actual publication was very imperfect, and, so far as I am aware, it has scarcely ever been noticed in print. An eye-copy (here reproduced) will be found, in fact, lithographed at the foot of the table of the "Arianian Alphabet" inserted opposite p. 262 of Ariana Antiqua. Its imperfection will appear upon comparison with the second photograph, which reproduces the most careful of Masson's copies together with his tentative decipherment: the superior exactness of the forms of the aksaras in this second copy will in the light of our present knowledge escape no one. The eye-copy was mentioned in the Journal of the Asiatic Society of Bengal for 1863 (p. 144) by Cunningham, who read the date, in part erroneously, and the word dharma in 1. 2, and by Dowson in this Journal for 1563 (pp. 230 -1).

The inscription is in two lines, and the real commencement is not as in the facsimile, but with the 12th and 6th akyaras from the left ends of the two lines respectively. I read as follows:—

- 1. 1. sebalšarae afhavimšatihi 20. 4. 4. mase ape (or pi)laera stehi dašahini 10 iše chunammi protista(tha I)pita šarira [ra]pavamtimi thukamsaghanimitrona navakarmiana
- ede(i!)nu kaśalumule[na] etesa dharm(mm!)apa lokika vija yaşu dharm(mm!)u khae badhosyeta śarira sarvasutvo(ā!)pa yirva(ā!)nasabharue bhavatu rajasa a(!)gri(ggru!)pracanya.

That this reading presents a number of details open to discussion is sufficiently plain. And doubtless some points will remain uncertain, unless—which is not beyond the bounds of possibility—the far itself should somewhere

A KRASSOMI INSCRIPTION

りり なとてもそれがとしいってきょうよくがりままでかりまるがいっちゃんかっというかんないしょう Inscription on earthon Sar found in Tope Nolls of Bidda.

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                                                                                                                                                                                                                                                                         adomi kita kina disabi na litu. Shawii ya shadsusi hissara disadesa dewa diwaseta momesakumesa khesaku
Blandbirja begagsi (i akoja šemeta pasama
Admiekta a skolka, ka na iska simuda jua sinukagka fine sa dheskisa benia nicka sekomum mbiska siska neka Skaidi sya
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come to light; it seems not to be in the Indian, or the British, Museum. In the meanwhile we may consider a few of the questionable matters.

- 1. sebatiarae. The vowel-sign over the z is, no doubt, an error in the copy: for the form sambatiara compare the Gondophares inscription and the Ara inscription of the year 40, edited by Banerji (Indian Antiquary, 1908, p. 58) and Lüders (Berlin Academy Sitzungsberichte, 1912, pp. 824-81).
- 2. mase. Read masa, the c vowel being again due to error. Under the two aksaras is a curved more or less horizontal line, of which nothing can be made. But for a second figure, which is attached to the bottom of the ma, a reason may be assigned. In the second line we miss after [kaśala]mule the aksara na, of which the figure has the shape; it is therefore probable that the figure was really intended for this aksara, and was a correcting insertion above the line.
 - 3. apilarsa. The second copy has apre.
- 4. stehi. In the second copy the reading is rather daste, or naste, due no doubt to a misreading of part of ste as da, or na; a third copy has clearly stehi.
- 5. pratistal that ?)pita. The second copy has pratajastal that ?)pita, and the published facsimile a slanting line, placed somewhat
 high up, following the ti. It seems probable that an original

 4 (or /) was misread as //. On sta and that see below (No. 18).
- 6. [ra]javamtimi. Some of the manuscript copies, including the second here reproduced, insert before ja a ra, which may be a mere dittograph of the last aksara of sarira. But probably it was really present in the original, and the word should accordingly be rajavamtimi.
- 7. Saghammitrena navakarmiana. The two successive na's appear to differ in shape, which suggests that the former should be read as na. The same form recurs in chunami and nirrana; probably every non-initial na should be na (see Dr. Konow in Festschrift f. E. Windisch, pp. 87-8). Navakarmiana (read ona) is possibly a misreading for okarmikena.
- 8. 1.2. cdc(i f)na. The de resembles rather rn. In kaialao the vowel of ku has been overlooked.
- 9. dharmana. The algara read as rma might equally well or even better, in both cases, he is, or possibly in. Here only the sense can decide. Concerning mesa see below (No. 18).

- 10. lokika. The facsimile is here quite unreliable, and the various manuscript copies diverge considerably. The photographed copies give lobhibhu, which would be lokika.
- 11. yaşa. The şa is probably a misreading for śo, from which it differs only slightly.
- 12. badhosyeta. Here we are left to conjecture. The ba might possibly be ta; but one is strongly tempted to suppose an imperfect reproduction of bodhisvata = bodhisattva, a word which has now been found by Mr. Marshall in his new Taxilà inscription (supra, 1914, pp. 987 sqq.). The e in sye may be erroneous, as in sebatśarae and mase above.
- 18. sarvasatva(\tilde{a} ?)na. In the facsimile we read something like *sapamana*, and the second copy has $\nabla \mathcal{F}$. Another copy has $\nabla \mathcal{F}$; and, since the word required is not doubtful, I conclude that the original had $\mathcal{G} = tva$ (or $\mathcal{G} = tv\bar{a}$; see below, No. 18).
- 14. sabharae. No doubt saṃbharae would be a possible reading; but Masson read *bhara, and the word saṃbhāra, "equipment," "means," gives a suitable sense. On reā see No. 18.
- 15. agri(ggra?)pracamya. For a the copies present an unintelligible form, which seems to contain a y. The pra might be tim, and the cam perhaps ram. We have a sufficiency of parallels to prove that the idea intended is that conveyed by the word agrapratyamia, and we are free to choose between two suppositions: either there has been a misreading of agrapracamia (confusion of ya and ia being easy), or the insertption had employed a synonym, possibly agrapracama agrapratyamia, in which the second member had the (rare) sense of "tribute", "share". On aggra see below (No. 18).
- 17. As regards the last double symbol in the facsimile, it plainly is a dittograph for the *la* which comes at the beginning of the line. Possibly it accounts for the missing *va* after *kušulamūle*.
- 18. The inscription being written with a pen, we are prepared to find in the forms of the characters resemblances to those of the early documents from Central Asia; and upon a reference to Professor Rapson's plate in the Actes du XIV Congrès International des Orientalistes (i. p. 213) such resemblances, e.g. in the forms to ti (vinnaveti and vajeti), will actually be

apparent. This emboldens me to recognize an d in the horizontal stroke attached to the right of rv and tv in 1, 2 (Nos. 18, 14 above) and perhaps to the in 1, 1 (No. 5 above). The mark is indeed differently placed and is also not slanting; but we might expect variation in detail. A reference to the same plate and p. 221 will explain the alternative rma and mma in No. 9; on aggra (No. 15) see Epigraphia Indica, ix, p. 142.

Accordingly, inserting marks of vowel length and anusvaries and normalizing the masals we arrive at the following reading and interpretation of the inscription

- 1. 1. sa[m]batkarae a[t]thavimkatihi 20. 4. 4. masa Apeläe[s]sa stehi dakahim 10 ike chunammi pra ti[t]tha(stat) pita[m] karira[m] rajavamti[m]ma thaba[m]mi Sa[m]qhammitrena navakarmiena
- 1-2 olona kuśalamulena etesa[η] dharmana[η] lakda - vijja - yaśo - dharma - khae - bodhisvatasecora[η] sarvasatvana[η] nervanasaŋibharae lihavatu raja[s]sa agrapracaŋiśa[η].
 - In the year 28, on the 10th day of the month Apellaios on that date was enshrined a relic in the stupa Rajavat (in a royal stupa) by the nacrokarmika Sanghamitia. Through this store of good works, in the lapse of these qualities worldly knowledge, glory, and merit, may the relic of the Bodhisattva be a provision for Nuvana, and may a principal share [of the merit thereof] fall to the king."

The tenom of the inscription being for the most part common form, and the king's name being unmentioned, the interest is here concentrated in the date. That the era employed is the same as that exemplified in the Wardak inscription of the year 51 (now edited by Mr. F. E. Pargiter in Epigraphia Indica, vol. xi, pp. 202 sqq.) will hardly be contested; and this is, of course, the era of the reign of Kaniska. Accordingly,

this record furnishes evidence for the rule of the Kaniska dynasty in Hidda, a place about 5 miles to the south of Jalalabad, in the 28th year of their era.

Concerning the language of the inscription the following points may be noticed:—

- 1. The spelling is, as is characteristic of Kushan inscriptions, highly Sanskritic: thus (a) the three sibilants are distinguished; (b) there is no loss of single intervocalic consonants, except that ya and ye appear as e (thus apelaesa = apelayasa) and intervocalic bh as h—even j is preserved; (c) intervocalic tenues are not softened to mediae, except in the case of $th\bar{u}ba$ (which occurs also in the Wardak inscription and may go back to a by-form stumba) and in edena; (d) conjunct consonants are not assimilated, except in the case of st > tth, st > tth
- 2. In declension and conjugation there is nothing with which we are not familiar from other similar inscriptions. This applies, for example, to the double locative singular (in -e and -ammi), the locative (instrumental) plural in -hi, and the verbal form bhavatu (instead of hotu).
- 3. As regards the form navakarmiena (if the actual reading should not be "karmikena), I am not prepared to admit a loss of intervocalic k. The matter is somewhat interesting, as it exemplifies a rather widespread phenomenon, namely, an umarent early disappearance of suffixal k. This is instanced in the Mathura inscriptions (see the edition in Emanaphia Indica, ix, p. 188), the Manikiala inscription (Kartiyasa), and elsewhere. As there is no reason to presuppose for k in this position a special destiny, it seems probable that the forms go back to a type which was without the k, i.e. had for its suffix ya and not ka: thus mahasamakiya is not derived from au earlier mahasamphika, but is a parallel, and in type a more ancient, form. To this type belongs also atthabhagiya; in the case of forms with a preceding vowel other than i (e.g. pothaya " prausthaka) we may recognize the influence of analogy. On this subject we may refer to Professor Lüders' remarks in the Berlin Sitzungsberichte for 1918 (Epigraphische Beiträge, iii), p. 091.

VIII

NOTES ON THE EDICTS OF ASOKA

Br F. W. THOMAS

7. MUKHA-DĀNAMUKHA

THE phrase ete ca amne ca bahukā mukhā dānavisagasi vyāpaṭā = ete ca anye ca bahukā mukhā (masc.) dānavisarye vyāprṭāḥ, occurring in Pillar Edict VII VIII. 6, is rendered by M. Senart "these functionaries and others are my intermediaries: it is they who are occupied with the distribution of my alms . . . " (Inscriptions de Piyadasi, ii, p. 97), and it is explained (pp. 91-2) that the employment of the word mukha is similar to that of dvira in the sense of "means" (separate Orissa Edicts, i. 3).

Bühler, in his edition of the Pillar Edicts (Epigraphia Indica, ii, 245 sqq.), adopts the translation "both these and many other chief officials are occupied with the distribution of gifts" (p. 272), suggesting in a note that mukha either has itself the sense (given in the lexicons) of "chief" or stands for the adjective mukhya, of which that is the ordinary denotation.

There are certain passages in the Arthakistra which suggest a modification of these views; they are as follows:---

(1) c. 22, p. 57;

इस्तवार्यपादातमनेवमुक्षामनकापवेत्। वानेवमुक्षं हि परसः रभवात्यरोववापं नोपैतीति ॥

"Let him station elephants, horse, chariots, and foot under a plural leadership: for with plural leadership they are through mutual fear not liable to disaffection from outside."

This passage might be held to confirm the opinion of Bühler, since we actually appear to have the word mukhya in the required sense. But other passages will correct this impression.

(2) c. 27, p. 70:

वक्रमुखाननित वाधिवरवं वाधित्।

"Let him (the king) arrange his officials' functions under many heads and as non-permanent."

The sense of "leader" is here still possible, but less persuasive.

(3) c. 34, p. 98:

सभूमियाणं रावपचाणमेवमुखं ववदारं सापवेत्। परभूमिः बाणमनेवमुखन ॥

"The traffic in home-produced royal merchandise he (the superintendent) should place under a single head; that in foreign under several."

(4) Ibid.:

पवाधिष्ठातारः पव्यमुक्तमेवमुखं बाष्ट्रोक्षामेवव्यद्रापिधाः नायां निद्धाः।

"Let the superintendents of merchandise deposit the price realized by the merchandise in a single amount in a wooden vessel having one hole in the cover."

In the last passage it is clear that makha means "head" in the sense not of "leader", but of "heading" or "sum"; and it is highly probable that the same sense should be recognized in the preceding passage also. This suggests further that in the two preceding instances the compounds behamukhya and anchamukhya (if we are not actually to read behamukha and anchamukha) are not to be resolved simply into bahu + makhya and ancha + makhya respectively, but should be regarded as derived by the passifix from bahumukha and ekamukha (naturally without alteration of meaning). In the Vājānvalkya-smrti, it, 203, where the phrase under a single head official", makhya would, of course, be metrically unsuitables.

The exact force of mukha in relation to accounts may best be realized by, taking note of its correlative, which

is series. Thus, in the Arthusistra (c. 14, p. 60) the various sources of revenue are detailed with the addition carried (c. 14, p. 60) the various sources of revenue are detailed with the addition carried (c. 14, p. 60) these are the best of revenue is similarly we have ryayasirries. It may accordingly be suggested that, when Asoka says that his bounties are superintended by many "faces" (mukha), he does not mean exactly "many leaders" or "many intermediaries", but simply that the work should be in "many departments" or under many different officials.

The word danamakka has been carefully discussed by M. Senart (Journal Asiatique, ser. viii, tom. xv. pp. 131-4), who has cited the numerous inscriptions where it occurs M. Senart remarks that it does not appear to be employed in conjunction with the name of the object given (as in danam thableo, etc.), but that otherwise he observes no distinction in meaning from dana simply. Since the expression is found in inscriptions upon objects to which it refers (e.g. the Bîmâran vase and the Mânikiála cylinder). as well as possibly otherwise (e.g. in the inscriptions of the years 68 and 102 and in those of Zeda and Shakardarra), we cannot suppose the meaning to be "representative" of the gift (which itself might be elsewhere). Hence it seems lest to recognize a mere synonym for dana, a misapplication of a technical term, "gift department," gift heading," "gift account," under which the donation would be recorded in the accounts of the institution benefited. Or is it, after all, the inscription itself?

8. Paligodha--Palibodha

In Rock-Edict V the phrase dhanemamahāmātā . . . dhanemayutānam apalibodhāye viyāpaļā is presented

1 An analogous meaning may suit Sikydamuccays, p. 325, l. 14:

श्यत् धर्ममुखात् चनेका धर्मनुकाणवनुदि चर्चन । and Abhidhammajhamhani, ix, 6, vimebbamukhdni. by the different versions with several variations, as follows:---

Girner: . . . dhammayutdaan aparigodhaya (see M. Senert in J. As. viii, xi., p. 815) . . .

Khalsi: . . . dhammayutaye apalibodhaye . . .

Shahbazgarhi: . . dhramayutasa apulibadhe . . .

Mansehra: . . . dhramayuta (or *tasa) apalibodhaye Dhauli: . . . dhammayutaye apalibodhaye . . .

M. Senart (i, p. 143) translates "to remove all obstacles in the way of the faithful of the true religion", and Bühler (ZDMG, xxxvii, p. 269, Epographia Indian, ii, p. 468) "with the removal of obstacles and my loyal ones".

The meaning assigned to apulification, absence of obstacles," is held (Senart 1 p 127, n pp 137 St to be justified by the expression akasmapaldadha arbitrary obstacles, se imprisonment in separate Edict I of Dhan i and Jaugada, and by the employment of the word pare bother in the Pali canon where it is not uncommon the variant aparagodlar Bubber does not call after nonbut M Senart had already remarked upon it and had pointed to the confirmation furnished by the open gadha[ya] of Shahbargam Anhongh the continues is removed by the later and more correct readings or bolliam, Senart Journe Agatogue VIII N 526 X 1 Buhler) M. Senart's caution against sega mere inswriting in the Guings were a mass of alwayed, for the word palepolice a growing without a meaning in the Milito collision 24 122 It therefore demands a discussion

The form pulipodial does not seen the control of texts as at present edited. But it has to be a presented to us, along with the part expense to the number of the Buddhist Sanskiit works excepted by Sanskiit wor

his Sikpton muccuya (ed. Bendall in Bibliothera Buddhica, i, St. Petersburg, 1897–1902). I cite the passages:—

(1) p. 50, ll. 14-15 : Siguramati-sutra :

तं योधियसं वैवावृत्तयनियोधे वियोवयन्ति, वैवावृतं योधि-यसिवायतं यरवीयत्।

"They engage that Bodhisattva in the desire [or distractions] of service (or 'business'), service is indispensably to be undertaken by a Bodhisattva."

(2) p 100, ll 3 4 Sare alharmāpraerttinirdeki बुद्धधर्माभिवृद्धेन भवित्यं राचिद्वं धर्मपविवृद्धवानवेन ।

"He must be earnest in the law of Buddha, with a mind day and night desirous of the law."

(3) p 105 ll 12 13 Adhyasayasayeedana mitra

बहुपविजीधपविजुदी . . . जाभवत्कार:।

'Respect to acquisition ——is full of the desire of many desires (or 'anxiety of many anxieties')

(4) pp 108 9 the same text

चनीरवो भीति सदा मुक्ता पणिनोधमकेषु रति वर्णिला।

'He becomes ever respectless of elders, having developed a pleasure in the incantations of desire (or 'selfassistant')

(5) p. 186-1-40. Sugaramati-sutra

वामादारपवित्रुद्धः धर्मावत्रुतवती

Without having heeded dharmas, being greedy for (or ideatrated by) the life of desire?"

exp 249 il 8 9 Pitaputramamagama :

एव नाह्ये । पि यहम्पुटमस्पर बीयं क्यनतेनापश्चिनुदं मुनिरभाव-स्किट्सयमुक्ति नाह्य कामाप्रधातुः ।

no me the case of external things also what is unstruck, unstrikable, not disturbed by what is connected with colour, penetrable with the nature of a hollow, that is called the external other substance."

In some passages the implication of desire is self undertained at suggests at once an etymology connecting

the word with the root grdh. It does not take us long to discover that the word parigradha actually occurs with identical meaning in the Disgavadana (p. 351, ll. 9-10):---

अहं ताबबुद्दावासे पर्वृद्धो विवयाभिरतय।

"Now I am keenly desirous of home life and attached to the world."

Paliguddha is accordingly a Prakrit aspect of paregraddha; and, since the normal noun from the root grain is gardha, paligodha is a reformation upon the basis of puliguddha.

What, then, of the Pali puligralia? For this form also, with the meaning "omnivorous greed", is offered by the Dhammasangant (with gedha, 1059, 1136, and Mrs. Rhys Davids, Buddhist Psychology, p. 277). If we were tempted here to suspect a misreading, we should at once be restrained by the fact that the Mahāvyutpatti supplies a correct Buddhist Sanskrit equivalent in parigredha. No doubt, the participle puligiddha will sooner or later come to light. But we have already sufficient evidence to convince us that the history of the words with which we are dealing is truly represented by the following scheme:—

parigradha i paliguddha paligedhi. paligiddha paligeilha.

Linguistically this history presents a point of interest; for it shows that under some circumstances the change of r to i or u respectively was not due to the neighbourhood of a guttural (or labial), as has sometimes been thought but is originally a matter of dialect.

The existence of the word paligorila being thus amply evidenced, it remains to inquire concerning its appropriateness in the phrase of the Edict. Now we must take note of the fact that the word diagrammy at a diagrammy with a been shown to denote, not "the faithful of the true religion" or "my loyal ones", but "the

¹ The uncompounded piddha is, of course, known.

officials of the dharma (or ecclesiastical) department" (Ind. Ant., NXXVII. pp. 20 sqq.; JRAS, 1909, p. 467; 1913, pp. 387-91; accepted by Professor Laiders in his article Episyphische Beiterge, iii. p. 995 = Berlin Sitzungsber lite, 1913. No. iiii). The phrase dharma-yntanerm applipphhaya, "with a view to absence of greed (or seif seeking) on the part of the dharma-officials," will be seen upon inspection to be quite unexceptionable.

This, however, is not all: it appears also that the sense of "absence of obstacles" is no longer appropriate; and this reminds us further of the difficulty of explaining how the meaning "obstacle", which is indeed supported by the Pali Dictionary, became attached to the word pulibodha, a compound of budh, "to be aware," with the preposition pari. We might find an intermediary in "circumspection", "caution"; but an examination of various passages suggests another course. In Fausböll's edition of the Jātaka, vol. ii, p. 95, the sentence

Sävatthiyam kira pañcasată upăsakă ghara (or gharavāsa) palibodham puttadărassa niyyādetvā Satthu dhamma desanam sunantā ekalo va vicaranti

clearly means that

"In Sravasti five hundred upsisakas, having devolved upon their children and wives the cures of home (or of 'home life'), spent their time away listening to the Master's exposition of dharma".

Further, in the Nettipakarana (ed. Hardy, p. 80), the sentence nattha panabbharo, butha palibudho gatha palibudho, tatha pariyuthanam seems well to bear the rendering "where rebirth is, there is anxiety, where anxiety is, there is exertion". Accordingly it is with a sense of conviction that we find a Burmese scholar, who would have a traditional feeling for the proper nuance of meaning, rendering palibudha simply by "worldly cares" (Compendium of Buddhist Philosophy, Abhidhammathasangaha, tr. Schwe Zan Aung, 1910, p. 53).

This is not, however, by any means the whole story. A comparison of the passages in the Vinaya which exhibit the compound palibadh will show the following development of meaning: (1) "reflection", palibadho vinichayatthaya (Parivara, xii, 2; cf. Pāc. lxvi, 1, lxxxiv, 1, Bhkni-Pāc. vii, i?); (2) "respect of some extraneous consideration" = Skt. apeksi, hence "obstacle", ke nacipalibadho hoti (Pāc. xv. 2, xlix. 2); (3) "respect of something wanting" = Skt. akāāksa, hence "claim", raraseyyāsa palibadhanti (Cull. vi. 10. 2, Pāc. xvi. 1), or "title", drāmpalibadha (Mahāv. vii. 13; cf. Rhys Davids. Vinaya Texts, ii, p. 157 n., and note in the passage the occurrence of the words sāpekkho and āśā, "expectation").

Unfortunately, the new renderings "absence of anxiety", etc., for apalibodha seems to apply to the passage under consideration hardly 1 more satisfactorily than does the meaning "absence of obstacles"; and this is the more noticeable as in the following (adjacent) phrase, bamdhanabaddhasa patividhanaye apalibodhaye mokhaye, it is quite appropriate; it is again appropriate in the separate Orises Edict i, where akasmapalibodha, "unnecessary anxiety," and akaemapalikilesa, "unnecessary distress." are deprecated in dealings of officials with the people of the city-the people are not to be "disquieted or distressed", but there is to be a regularity of lawful administration (samaya). Shall we, then, suppose that the Girnar text, which correctly employs the two similar words in close conjunction, has been exceptionally faithful to the author's meaning, whereas in the other versions the apaligodha has been assimilated to the contiguous apalibatha? Or must we ascribe a confusion of the two words to the author himself, and by consequence to the usage of his time? That the latter supposition has something in its favour will appear from a reinspection

In view of the fact that a few lines above the satisfaction (discussion of the diammayetes is contemplated, we might indeed make applicable here "absence of cause of discontent."

of the passages already cited and of certain others. The facts may be illustrated in a tabular form :--

gridease p rigidaho (Divyav.). avasapalibaho (Vinava). av is mac kari drāsapaligedhi (v.l. is hi), kulam., kulap. (Afgut, Nik. i. 66).

bar analy hapairguddho . . . adhasa (airah (Siksas.).

káma - rão - vintresa - veniban dha-pa, aedha-partuutthana (Angut. Nik. 1, 66).

yad . . rūpagatenāpaliguddham . . . ayam ucyate bahya akasadhatuh (Sikessamuccaya).

gharavásapaliladha (Játaka). kule gane lähhe avase paliboile (Milindapanho, p. 388).

yattra punabbhavo, tattha palebedho, yattha palibodho, tattha pariyutthana (Netti pakarana).

ákáso aloggo asatto appatitthito apalibuddho (Milindapatho, p. 888).

These parallels show an extensive similarity of application in regard to the two words, sufficient to excuse the inditer of the edict, if he failed to distinguish them. But still there are certain considerations to be set on the other side. It will be observed that the Pali. in which the similarity of the two words is less overpowering (paligedha and palibodha), perhaps does not confuse them; for the sense of "desire" or "greed" it reserves the former, while the latter is confined to that of "trouble", "anxiety", or "claim". It is only in the Buddhist Sanskrit that the ether is called "free from greed". whereas in the Pali it remains "untroubled", "calm". The confusion, therefore, is on the side of the dialects which change r to u, and could not be ascribed to the writer of the original Magadhi text. If, therefore, the confusion was realized (as appears) at Shahbazgarhi and Mansebra, we do not find it unnatural (even irrespective of the similarity of go and bo in the Kharosthi script); while its absence at Girnar is all to the credit of that careful text and scarcely consonant with a supposition of the original author's error. How, then,

are we to account for its presence at Khaosi and Di cuii? Here, perhaps, we may reflect that it is inadvisable to know too much; but at least we may remark that the misunderstanding is in these two cases more extensive than elsewhere, since it has metamorphosed also the preceding dhancmayutanam into dhammayutaye, a sufficient indication that the sense of the passage was not understood.

On the whole the probability seems to be that the original text is best represented by the Girnar version.

Regarding the form paligodha we have taken note of a point of linguistic interest. A second matter of the same nature arises in connexion with the two words jointly. In both we have evidence of the l (for r) outside the Magadhi sphere, namely, at Shahbazgarhi and Mansehra. This reminds us of the fact that an affinity between an Indian l and the gutturals and labials there g and b) is a familiar idea to comparative philologists. A more general interest attaches to the fact that Buddhism has in puliballia a technical expression for the cares of the world, which Christianity deprecates under the term $\mu \acute{e} \rho \mu \nu \sigma$ $\tau \acute{o} i al \acute{o} r \acute{o} s$.

We have now spent perhaps sufficient time in the company of paligodha and palibodha; but the reader will admit that a rather large and complicated history lay behind the variation of a consonant in the Girmar text.

9. Asvāsa - Višvasika

The words last discussed may remind us that the nice of "comfort", "composure", "freedom from anxiety plays a considerable part in the Buddhist system. Thus the Angultara-nikaya expounds (i, pp. 1923) a group

Darbinhire, Reliquip Philologice (Cambridge, 1895), pp. 216 -qq : Wackernagel, Altinil. Grammatik, p. 221.

The reading poligodho was defended by Prechel, Still. 1881, 1880, and Michelson, JAOS, xxi, 244 talso Johansona, see rei content the basis of a derivation from a good or gold.

of four essassis, and in another passage (iv, pp. 184-5) it is emphatically said—

ahan, i. Siha assatthe paramena assasena assasaya dho anam desenu, tena ca savale vinemi,

"For I. S.ha, being composed with the attermost composure, teach a dharma leading to composure, and therein I train my disciples."

So in the Samyutta-nikàya (ii, p. 50)---

na hi nána so áyasmá imasmim dhammarinaye assásani alattháti,

"For surely His Reverence has not in this dharma-training acquired a composed confidence."

In this latter passage we seem to detect a tendency to a transition from the idea of composure to the quite proximate conception of "settled conviction".

In the Edicts of Ašoka, where forms from the verb asiras- are several times recorded (see M. Senart's index). I do not trace any technical application: the synonym according to the vicinity, remains in the same sphere of ideas. But it is perhaps worth while to notice that another compound of seas, namely, viscas- (viscas-y-), is employed in the Sarnath Edict (ed. Professor J. Ph. Vogel in Epigraphia Indica, viii, pp. 166-72, esp. 170) with the meaning of producing familiarity, or certainty, in regard to a document.

Inscriptions of other provenance give evidence of a special application of a term derived from volvas. This is viściosika, which is several times found (see Professor Luders, List of Brilimi Inscriptions—supplement to Epigraphia Indica, vol. x—index) as the name of an official in the Buddhist order. Do we here recognize a general or a special sense? In the viświsika an expounder of texts, a confirmer of faith? Or is his office simply that of consoling persons in trouble? Against

The former sense muits better the compound with ei; and in both cases the 4 needs explanation.

the former supposition we may set the fact that the business of instruction would more probably belong to another official, who is entitled dharmakathika, fexpounder, or narrator, of dharma." If we hesitate to believe that the Buddhist order appointed a special brother to administer consolation, it is opportune to remember that sokavinodana, "dispelling sorrow," was the topic of a class of writings-an example exists in the Tanjur, ascribed to Asvaghosa; in the Hargacarita of Bana the Buddhist recluse Divakaramitra is implored to console the widowed and afflicted princess Rajvasri sumucitaih sumascasanaih," with the customary consolations," called also in another passage kokupanayanopaya, "He will guide our pious sister into the path of wisdom by the good words of Sugata, which pierce the mists of sorrow, and by his own wise counsels, illustrated with apt examples and weighty with various sacred texts" (Translation, p. 245). The ascetic subsequently (pp. 254-7) complies in a pathetic address. We may remember that in Latin also we have the Consolatio, based, no doubt, upon some Greek model.

An interesting discussion might be made concerning minor literary species in Sanskrit which are hardly noticed in the histories of the literature. But I must surrender the subject to Professor Luders, who. I understand, has long had in manuscript an article dealing with it, and to whom, indeed, the first recognition of the Sanskrit Sokavinodana, or Consolatio, is due (ZDMG, lviii, pp. 707-14). We may, however, instance the Epistle (e.g. the Suhrllekha of Nāgārjuna), the letter (lekha), the Friend's Counsel (Hitopadeia in Sanskrit and—a quite different type—in Pali), and a species of the latter, the address of advice and exhortation to the young (an example in the Kādambarī, ed. Peterson, i, pp. 102 sqq, translation by Miss Ridding, pp. 76 aqq; also the parody.

10. Samsaraya

In the Sărnăth Edict discovered by Mr. Oertel and excellently edited in *Epigraphia Indica* (viii, pp. 166-72) by Professor Vogel the sentence

hedisā ca ikā lipī tuphākaņītikaņi huvā ti saņsalanasi nikhitā

has been translated as follows :---

"Not only has such an edict been laid down (by me) for you that you should remember 'So be it!"

Here the word supsidana has been, with the concurrence of Professor Kern and Dr. Bloch, regarded as equivalent to supsimiring, "remembrance," an equation to which in itself no objection can be taken. Nor, again, is there anything not consonant with Sanskrit style in the expression "deposited, or laid up (niksipta), in memory ".

What first arouses a suspicion is the use of the words hedist ika lipi. an edict like this," which seems to denote a second copy of the edict; and this suspicion is confirmed by the immediately succeeding sentence...

ikan er lepin hedisam era upasakanantikan nikhipatha.

"And an exactly similar edict you are to deposit in the vicinity of the upisakas."

For clearly the rendering "But you must also lay down exactly such an edict for the lay-members" disregards not only the ikan, . . . hedisam eva, but also the meaning of antikan, and is inappropriate to the status of updauka.

This is really decisive: the samealana must be a place, and the Edict is to be deposited, or set up, therein. It remains to inquire what evidence can be found as to the fact and as to the character of the locality. Naturally we turn to the Vinaya, and we are not long in finding (Cullavagga, vi, 3. 4, pp. 152-3, of vol. ii of Professor Oldenberg's edition of the Vinaya) a passage dealing

with markers, "bed," pithus, "chairs," talindos, "terraces" proghagus, "vestibules," in the Vihara and ending--

tena kho puna samayena rihara analindaka honti apatus rana bhayavato etam attham arocesum anajanani bhikkhave alindam paghanam pakutam osarakam ti dlinda pakato honti, bhikkha hiriyanti nipajjitum, anajanami bhikkhave samsaranakitikam ugghalana-bitikani it.

"At that time, again, the Viharas were without terraces, without approaches (?). They reported the matter to the Blessed One. I allow, Bhiksus, terrace, vestibule, antechambers, and covered ways. The terraces are public, the Bhiksus are ashaned to lie down. I allow, Bhiksus, those made with samsaranas, made with doors (?)."

What the supparison is does not clearly appear: but in connexion with the terrace (dlinda), we are naturally reminded of the samosurmus of the Jain Tirthamkaras, which are illustrated and considered in Dr. Huttemann's "Miniaturen zum Jinacarita" (Buessler Archiv, iv. 2, 1913) and in Dr. A. K. Coomaraswamy's "Notes on Jaina Art" (Journal of Indian Art and Industry, xvi No. 127, 1914). Indeed, the word samaraswamya is given by the Mahavyutpatti (223, 93) next to progbhave.

The etymology would suggest a place for walking about a lobby. But then our thoughts turn to the cankernes, or walk, which in the case of Buddha is figured at Sancin as a triangular promenade. Whether students of architecture would be prepared to admit the possibility of Asiatic connexions with our ecclesiastical edifices. I am not in a position to say—the researches of M. Foucher and the Central Asian discoveries have of late years opened out

I had almost omitted the bhitikhita, "peg in the wait, the corner raije, "loop for the circura," and even the circura, " pole for the circura," quasi "hat and coat stand".

In Sanskrit the dictionaries give the sense of "maje secret"
 See M. Foucher's The Decimings of Buddhist Art. etc., pp. 93-4

many new cossibilities. But an analogy at least may be seen in the cloisters of our churches and colleges,

It will be observed that in the summercial is deposited only the monk's copy of the edict, the first sentence relating expressly to a Sangha of Bhiksus (in Pataliputra). For the Upatakus, who presumably are not regarded as living in the Vihara, or at any rate as using the expression, facilities for steing the edict are to be provided class where.

Accordingly, the following translation may be proposed: "In order that a similar edict may be within your reach, it has been deposited in the minimum. Do you also deposit a similar edict within reach of the Upumkan."

This same edict contains two other points of interest. The first concerns the disfrocking of the schismatic brother and giving him two white robes (adatani dusani) in place of the monk's yellow. This practice having already been evidenced from the Pali by Professor Neumann (Digha, trans. ii, p. 243; cf. Culia, v. 21, 2), we need not dwell upon it here.

The second point is in connexion with the interpretation of the words viensayatha and viensapayatha. I find a difficulty in following the editor and others in holding that these pronouncedly causative forms "can hardly have a causative meaning". In the almost identical sentence of the Rupaith Edict the form employed is a non-causative viensitariya. The word is one which enjoys a high prestige for difficulty, and to which, since doubts are still entertained by some scholars, I trust to be able to recur in a further instalment of these notes.

In this particular edict, however, there seem to be grounds for a clear decision. For what is the sole subject of the rescript? Expulsion from the Samgha, we answer, on grounds of schism, and publication of the decree to that effect. How, then, is the matter introduced? "Whoso, Bhiksu or Bhiksuni, divides the Samgha, he is to be arrayed in bright robes and—andviscoi dudacyiye—made

to dwell in a place which is not a residence (of monka, dudso)." When we meet the verb vivdsay at the end, after an interval of a few lines, can we resist concluding the edict (partly in agreement with Dr. Bloch) as follows?....

dvatake ca tuphākam dhāle savata vivāsayātha tuphe elena viyamjanena. Hem - eva savesu kojavisavesu elena viyamjanena vivāsapayāthā.

"As far as your administration extends, you are everywhere upon this intimation and without further orders, cf. JRAS 1911, p. 391 to expel. Likewise in all the districts of the forts [of local chiefs, whose intermediacy accounts for the double causative tridadpay you are upon this intimation to require expulsion."

11 PRODESIKY YGUN

In our discussion of the word prodess a which was regarded as a synonym of prodeste some reflection was occasioned by the long a for which two vicinitive explanations were propounded. It must be contessed that we have overlooked the simplest and most satisfiant by all. The form is derived from prodest but to improves in the sense not of district but of report. We have again cite the Arthuristics.

वैदेहसम्बद्धानो वा सार्वप्रमाल राष्ट्रः प्रेषयेत । तेन प्रदेशेन राजा मुल्लाध्यसस्य सार्वप्रमाससुपदियेत् । प्रशासन्त । । । ।

Or one disguised as a trader should seen a extent of the caravan one is to should inform the superior of a finite extent of the caravan

The analogy of the expression of proceeding to be a china regardence of the preceding to be a the treader. Problem 1 is therefore a synology in the same way as a conditional is a finite or a summation of date and secondary former and the same are the same and secondary former.

MISCELLANEOUS COMMUNICATIONS

THE BUSHELL PLATTER OR THE TSIN HOU PAN

No excuse need be offered for further consideration of the ancient bronze in the Victoria and Albert Museum which is known as the Bushell Bowl, for there is a great lack of information on the subject of Chinese bronzes, and anything that is written concerning this particular object is likely to help in supplying the deficiency. Professor Giles has pointed out the misnomer by which a platter (pan) has come to be known as a bowl. It is not too late to make the necessary correction as I have done at the head of this article, and it is desirable that future writers should give the correct English name to this pan.

My reason for writing concerning this platter is that during the winter of 1912-13 in Peking, while searching is an old book-store on Lin-li Chang, I came across a rubbing which I found to be one of the Bushell platter. As far as could be remembered by the owner of the store, this rubbing came into his hands through the late Yang Li shan, a well-known connoisseur of a generation ago and the intimate friend of Dr. Bushell. Mr. Yang was a Metropolitan official, a rare scholar and an authority much in demand by the collectors of Peking. He had the entries into the palaces of the Princes and was also sought by the Imperial Household Department in the classification of art treasures. He was a close friend of Prince I, and it was doubtless through him that Bushell secured this platter. Prince I was a careful collector of bronzes and pictures. and has left behind him a reputation for keenness in detecting frauds. I have seen three pictures which belonged to him and they were of genuine merit. not have a large collection of antique bronzes, and they

JRAS. 1915.

are now all scattered, Tuan Fang having secured a few of them, which I have seen. This small number of things from the collection of Prince I which has come to my notice has confirmed in my mind the truth of the opinion usually expressed in Peking art circles concerning the good judgment and careful habits of selection of Prince I. This platter, then, was owned by Prince I, a collector of good repute, it was known to Mr. Yang, a keen critic (even if, indeed, it was not sold through Mr. Yang to Dr. Bushell), and it passed into the Museum through Dr. Bushell, who is remembered as a cautious and well-informed connoisseur. These facts give strong presumptive evidence as to the intrinsic value of the platter and also as to its being in reality what Bushell claimed it to be.

The rubbing which I obtained is very clear. I have also a rubbing of the inscription of the San Shih Pan, a platter which is one of the most famous pieces now remaining in the Peking Palace (see JRAS., April, 1912, p. 447). This platter of the San family is the best example of a bronze vessel of this shape of undisputed antiquity. A detailed comparison of the rubbings of these two platters could not fail to be instructive, but my present purpose is restricted only to a notice of the style and peculiarities of the characters of an inscription which is admitted by all critics to have been east and not incised.

Professor Giles in Adversaria Sinica, No. 9, p. 293, has given a translation of a passage from the Tung Tien Ching Lu of the thirteenth century as found in the Tun Shu Chi Cheng. Another slightly different version of what was evidently a common original has been published in vol. v of the Bucyclopedia of Fine Arts — Mei Shu Ta'ung Shu—under the beading Ku Tung Chi Kao (An Examination of Ancient Bronzes). I had made a translation of this for my own use before seeing that of Professor

Giles, and I will quote from my own translation. As to the two types of inscription-kuan and chi-the author says, "the lines were fine like hairs and were even. regular and distinct, without a trace of being blurred. The characters were rounding like the surface of inverted tiles. They were not hold or deep. Both large and small characters had a uniform depth. . . . If vessels are now found with inscriptions blurred or cast in an irregular mould, these are the work of amateurs or imitators." A comparison of the inscriptions of the two platters shows at once that the inscription of the San Shih Pan agrees in every particular with the above standard of correct ancient bronzes, and that the inscription of the Tsin Hou Pan has many of the faults which should place it in the class of work done by "amateurs or imitators". The edges of many characters of the Tsin Hou Pan are rough, though this has been the result sometimes of recent attempts to remove extraneous matter from the surface in the hope of being able more easily to decipher the characters. The inscription is blurred in many places, there is an irregular depth of the characters, the inner surface is frequently not rounding but sharp and the lines are often too coarse. be said without fear of successful gainsaying that the inscription of the Bushell platter shows at least that it was not the work of a skilful artizan such as the one who produced the perfect casting of the San Family platter. The workman was an amateur without doubt, but whether or not we should go further and classify him as an imitator of his own or a later age or as a forger of the Tang, Sung periods, depends chiefly upon our own inclinations. For my own part. I do not think that any more definite decision can be made from the style of the inscription than that it is not of a high class. Some characters have every appearance of having been cast, and others bear the marks of incision. The style of the characters is such as of those used in the Chow dynasty, but of course these have

been constantly imitated during succeeding periods. The length of the inscription is most unusual, but it must be remembered that the size of the platter is also unusually large and the number of characters used is not greater in proportion to the size than in the San Shih Pan.

The veneer that has been plastered over the surface of the platter proves nothing more than the desire of some possessor to preserve his specimen, and does not help us to any decision as to age. While I do not believe that anything can be definitely determined about the inscription further than that it is poor workmanship, I cannot refrain from expressing my inclination to believe that the inscription was originally east by a bungling artisan who was unsuccessful in his work, and that it was completed by incision. In no other way can I account for the dissimilarity in different parts of the inscription. This theory seems to be the only one sufficient to cover the existing facts. There are some characters which, if considered by themselves, would pass all the severe tests of having been cast, whereas other characters reveal at once the trace of the tools with which they were incised It is the kind of work which might be expected from an inferior but ambitious artisan.

The translation of the inscription has been done sufficiently well, and I do not propose to discuss the relative merits of the versions of Bushell. Chavannes, Giles, and Hopkins. Nothing can be learned from the facts given in the inscription to help us in determining the age of the platter. There is only one thing to which I think reference should be made, and that is concerning the identification of character No. 512. The identification made by Yuan Yuan and Wu Shih-fên is li, and the character may be seen as the last one on the reproduction of the San Shih Pan rubbing. Li is a generic term according to Po Ku Tu, as was also the term for tripod, ting. A pag or platter would be correctly included under

this genus-li, and there need be no hesitation in adopting this as the correct identification. There is no necessity of going so far afield as Mr. Takeda and Mr. Chalfant have gone in trying to identify it as an archaic form of lung. farmer. The use of li on the two platters is perfectly correct.

As to the platter itself. I was able, through the kindness of Mr. A. J. Koop, to make a careful examination of it on the afternoon of February 10, 1914. The pan was taken from its glass case and placed in the room of the Curator, where I was given every opportunity of handling it. I compared the rubbing with the platter, and found it to be identical in size. I then submitted the platter to the tests used by the Imperial Household Department of the late Manchu dynasty. (1) As to the patina, it is chiefly of dark brown or russet colour, though there are a few spots of low olive colour. It is the patina which vessels take on that have not been buried in the earth for any great length of time, or of vessels that have been buried in dry soils. (2) The sound given out when the platter was struck was clear and not confused like that of Sung bronzes. (3) When rubbed briskly with the palm of the hand there was no rank odour, as is the case with bronzes of the Tang and Sung period. These tests, together with those based upon my own personal experience in the observation of many specimens of undisputed genuineness, led me to the conclusion that this platter belongs to the latter part of the Chow dynasty, and that Dr. Bushell was approximately correct in assigning it to the seventeenth century n.c.

The workmanship of the decoration of the platter is on an equality with that of the inscription. It is of inferior quality. The touch of the artisan was not deft, but chumsy. He cared more for size than for good work. The result was that he produced a platter which could never have been considered of great artistic or literary value. In my opinion it is a genuine specimen of the latter part of the Chow dynasty, but is not a good specimen of a superior workman. It is in a different class from the San Shih Pan of the Peking Palace, or the Ch'i Hou Pan of the late Shên Pao-hai, which is now in the Metropolitan Museum, New York.

JOHN C. FREGUSON.

THE POETRY OF MUTANABBI

In the opinion of most Arabic-knowing scholars in the East, Mutanabbi holds the highest rank among all Arabic poets, yet in the estimation of European scholars he takes a very low place, compared with the pre-Islamic bards or with such later poets as Abul-'Atahiya and Abul-'Ala Al-Ma'arri. Like the Persian poet Anwari, he suffers from the fact that all his poems are in the quasida form, which both from its length and mechanism and conventional style happens to be particularly unattractive to European critics, while their subject-matter is both wearisome and irritating, consisting, as they do, of unending repetitions of two themes, exaggerated praise of a complacent patron or unsparing and unseemly abuse of some person unfortunate enough to incur the poet's resentment.

Both Huart in his Arabic Literature and Nicholson in his Literary History of the Arabs have laid stress on the unattractive features of Mutanabbi's style, his affected mannerisms, and his accumulation of fantastic imagery, and the few passages selected by the latter author for translation, though characteristic of Mutanabbi on the whole, are more calculated to reveal the side of his postry which is repulsive to Western readers than to august that after making allowances for great differences in tasts. Mutanabbi is really antitled to a high place among the posts of the East.

In the course of making recently a rough translation of the 6,400 odd baits of which the Diwan of Mutanabbi consists, I made a point of marking all lines which impressed me at the time as being notable, either from the sentiment expressed or the felicity of expression, and out of these lines, which I find numbered rather less than two hundred, I have picked out twenty, which are given below with a rough rendering into English. Most of the lines are gnomic or cynical in sentiment. Tastes differ so widely that it is not likely that any other selector would have taken many of my original choice, and probably even in picking from these the personal equation of the selector has played a large part.

تَعِلَسَيُّهُمَّ الْمُحَدِدُّ أَعِبَادِي على هنة فالمصل فينمن له الشك عَمَّا مُعَى مِنها وَ ما لِكَوْفُعُ لَذِذْتُ بِهِ جِنْلًا وَفِي اللَّذَةِ الْعَلَّفُ بَغِيضُ إِنْيُ الْحِاهِلُ المُتَعَاقِلُ تَيُعُنَّ عَسَمُ مساحدُهُ الْتَعَالَا فقلت نعم إذا شِنت استِفالا و البدُّرُ دُرٌّ بِيرُغْتِم مُس حَهِنَةٌ مَضِي قَبْلَ أَنْ نُلْقَىٰ عَلَيْهِ الْجَوَازُهُ ولاطئؤ فينزغنة ولاالنزائ ومخبذه حَجُّهُ لَاجِئُ النِّهِمَا السِّلسُمَا، ككفس القادرين على الثمام تشكؤي الجريس إلى الغربان والرحم النداشة فسيفنا والتاحد المالكين البرو العكن النبغ يسأمن غنارف السنست Text

 18 عَنَكَ اذَا هُزِلَتَ مَعَ اللَّيَالِي وَعَوْلَكَ جِيْنَ قَصْعَدُ فِي وَرَاشِ 19° نؤكانَ سُكْنَاى فِيكَ مَعْقَصَةً لَمْ يَكُنِ القُرْ مِهِ الْمِيْرِ الْمِعْرِ الْمُوْمِنِ الْمُعْرِ مِهِ المُعْمِدِي المُعْمِد

Translation

- 1. Let not friendly tongues, inspired by heatile hearts, decrive thes.
- When thy superiority raises thee not above the necessity of thanking a base man for a gift, the superiority lies with him who receives the thanks.
- Life lies clear before him, who is ignorant or careless as to what has happened in it and what is expected to happen.
- 4. There is a sickness lying concealed in love like poison in honey, of which I tasted in my ignorance and death was in the taste of it.
- 5. As for pride, this is no habit of mine among them, except that I am in sooth a fee to every ignorant fellow who pretends to be use
- To my mind the greatest of sorrow hes in a joy the possessor of which knows aurely that it will pass away from him.
- 7 They asked me, "Will be cause thee to reach as high as the Pleiades?" and I answer d. Yes if I wish to sink lower in dignity." (The jest means to suggest hyperbolically that his present position in the favour of the noble principariod by him is higher than the dignity ironically alimbes to by his critics.)
- 8. He affects to show ignorance about me though I know him well, and the pearl remains a pearl in spite of him who knows not its value.
- 9. When what then intendent is but a verb in the accret tense, it becomes a past verb before the signs of jams can be attached to it. (This line continue several plays on grammatical terms)

- 10. He is too great for any comparison: his hand is not an ocean (of beneficence), nor is he a hon, nor is his opinion a sharp sword. (An allusion to come of the stock metaphore of encominatio peres.)
- 11. Every act of forbearance, which occurs without the power of exacting vengeance, in this a subjecting to which the base resort.
- 12. I have seen nothing among the faults of men so grievous as the failure of those who had it in their power to attain perfection.
- 13. Make no complaint before the folk, whom thou wilt thus cause to triumph over thee, like the complaint of a wounded man before crows and vultures.
- 14. The companionship of the base is an accuraced thing, for it is in truth a guest, which brings along repentance with it as an uninvited guest. (The word معنى at the end of this line is the word which is the answer to the commutation propounded by Harri at the end of the 24th Assembly وما وصف اذا اردب بالنون بضرح من المزبون و تعرض الهون
- 15 He speaks the truth, even when it injures him to do so, and his two secret and outward states are light alike
- The two sons of the enemy, who serve to increase the number of his host, are but like the two letters of ..., which make up the word unaisigan. (This also is a grammatical allusion, the word given being the diminutive form of the noun, made by inserting the letter ... twice.)
- 17 I am afflicted with a calamity like that of the rose which is placed near to noses more fitted to have the nose-ring of a camel placed on them.
- 15 They attack thee when thou art made lean with the vicissitudes, and fight like dogs around thee (to get nearer to thee) when thou art prosperous.

- 19. If my sojourn in thee had been any injury to me, the pearl would not have remained within the cystershell. (The poet means that he would not have accepted his uncongenial surroundings if his innate merit could have suffered thereby.)
- 20. Thou art pictured in my heart, so that thou seemest never to leave me and it is even as if despair of union with thee constituted a promise of union.

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NOTE BY D. S. MARGOLIOUTH

The most famous collection of the wit and wisdom of Mutanabbi is that made by the Sahib Ibn 'Abbad, who died 385 a.m. It is printed in the Wasilah Adabiyyah of Husain Marsafi, Cairo, 1292, ii, 67-79. An asterisk has been put against the lines in Mr. Dewhurst's collection which are also found in the 300 or thereabouts chosen by the Sahib. No. 9 is taken by the author of the Sirr al-Bulaghah as an illustration of the excellent rule that technical language should not be employed in poetry. A most interesting addition recently made to the printed literature on Mutanabbi is the Wasilah baina't-Mutanabbi wa-Khusumihis of 'Ali b. 'Abd al-'Aziz al-Jurjani, ob. 366, Saida, 1331. Perhaps I may also call attention to the Hatimiyyah, embodied by Yākūt in his Irshād al-Arīb, vi, 504-19.

PERSIAN AND ARABIC WORDS IN THE SATSAI OF BIHARI LAL

In the course of revising a translation of the Satsai of the Hindi poet Bihari Lal, which I made in 1907, and which I hope, after following the Horstian maxim "nonumque prematur in annum", to publish soon, I have been struck with the comparatively large number of words of Persian and Arabic origin which appear with little or no change in this typical Hindi poem. If Doha No. 705 (Grierson's edition, Calcutta, 1896) be genuine, this work was completed on March 31, 1662, and in style and subject-matter the verses of which it consists are as far removed from Muhammadan influence as it was possible for them to be. The extent to which foreign words are used in such a poem at such a date is a striking indication of the penetrative power of the language of the Islamic conquerors.

The following list of words of Persian and Arabic origin occurring in the Satsai is, it is hoped, a complete one The numbers given refer to the Dohas, 726 in number, in Grierson's edition:—

- عكس akus (reflection) is the Arabic عكس.
- 16. खोर sor (fame) is the Persian . The same word occurs (683) in a different sense, meaning noise.
- 17. तापता tiftd etwisted silk, taffeta), is the Persian
- 20. Tarat possi (increase) is the Arabic will.
- 21 मुख्य mulak (sovereignty) is a corruption of the
 - चानिक dmil (governor) is the Arabic .
 - other Dohas (269, 278, and 564).
 - Arabe , roque.
- عرف عرف tarnph (direction, towards) is the Arabic عرب.
- ol win fanjtarmy) is the Arabic فرج, and occurs again in Doha 703.
 - बीच gol (troop) is a corruption of the Persian . غول
- 73. المجتابة (evolution) is a vulgarized form of the Persian بالاعتراد girah.
 - عبواتر kabiltar (a pigeon) is the Persian كبوتر.

- the triffer addit (proved) to the Arabic and.
- 88. विरसाय sirtij (a chiel) is a correpted form of the Persian ्रांज, sartij.
- 89. चर्च garam (hot) is a vulgarised form of the Persian
- 94. W had (extreme limit) is the Arabic ... hadd.
- 106. Twich (face) is the Persian , and occurs again in Doha 722.
- 117. THE day (mark or brand) is the Persian gla, and is found also in Doha 509.
- 127. अरबद kdynd (paper) is a corruption of the Persian كاعذ, and re-occurs in Doha 402.
- is a corruption of the Arabic المالة. The same inflected form is found again in Doha 719
- 148 gara guldb (a rose or essence of rose) is the Persian L. This word is of very frequent occurrence in the Satsai, being found also in Dohas 290 382 389, 476, 487 539, 540, 548 631 632 645 and 646.
- 151. त्रेष tej (swift) is the Persian تسر.
 प्रवाद hajdr (a thousand) is the Persian مراً and occurs again in Dohas 466, 527 667 and 697
- جعل chugul (a tale-bearer) is the Persian حيا
- 189 **Thank** khiydl (thought) is a vulgar form of the Arabic خيال khaydl, and is to be found also in Doha 560
- 193. Two handm (hot bath) is a corruption of the Arabic plan hammdin.
- 212. श्रीष goi (hall) is the Persian كرى. عوكاني. عوكاني chaugan (game of polo) is the Persian چوكاني
- 220. Wild pydle, inflected form of WINI pydle (cup) is a corruption of the Persian Ling piydle

- re-copure in Dohas \$30 and 660.
 - 281. Wilw sabil (course) is the Arabic Jame.

 - 248. जुनार sumdr (counting) is a corruption of the Persian المار داد داد داد العام د
 - 252. विवासि sileile (smooth) is probably a corruption of the Arabic الملمة, meaning a chain or series.
 - 259. चचाच buldy (calamity) is a corrupted form of the Arabic & buld, and is found again in Dohas 261. 403, and 684.
 - 269 water lagain (bridle) is the Persian all.
 - 275 वाइब ndhak (wrongfully) is the Persian احس .
 - 322. काजवूत killbút is a vulgarized form of the Persian अर्थ killbud (a form or figure).
 - 329 बरीच garib (poor) is the Arabic عربت. चित्राविदी newlydam (to protect) is derived from a corruption of the Persian ्र। nawlz (protecting)
 - 338. 331 judi (separate) is a word obtained by treating the Arabic last as if a Hindi feminine form could be derived from it.
- غرف mta garaj (motive) is the Arabic).
- 353 **दान** hil (condition) is the Arabic حثل . **भूगी** khúní (murderer) is the Persian خوبی **भूगान** khushydl (happy) is a corruption of the Persian خوشمال khushhdl.
- 382. बीबी sist (a phial) is a diminutive corrupt form of the Persian شبشه shisha.
- يدراد 390 عوراد hadrik (evil-moving) is the Persian بدراد.
- نمود 401. عود unmild (revealing) is the Persian المود.
- This word occurs again in Doha 606, but is there written **4447** with the dental sibilant.
- 458. विकार siker (hunting) is the Persian Ka.

- of the Persian if it questagt (the attack of a Cossack).
- 181. انک nauk (point) is the Persian نوک (nok in Old Persian).

निया noja (spear) is the Persian نيزه (neza in Old Persian).

- 491. **परी** jurt (golden) is the Persian وربى
- 492. علوبند guluband (a neck-band) is the Persian گوبند.
- مسر , used in its ordinary Indian sense.
- s to. **शाया hdyal**, the meaning of which is given by the commentator as आवस (attracted), is probably a corruption of the Arabic مائل (terrible).
- يان اندا: 515. urdera pdyanddj (a foot-mat) is the Persian بائي اندا:
- 524. **पापूर** phands (a Chinese lantern) is the Arabic فانوس.
- 526. बीरपा morcha (rust) is the Persian ورجه
- 534. ** abihi (a picture or portrait) is a corruption of the Arabic ** shabth.
- 538. बाबुब ndjuk (delicate) is the Persian 🛶 🖟
- . برى part (a fairy) is the Persian . برى
- 550. **عبداً** dumcht (lower part of the back) is the Persian
- 577. THE rilk (path) is the Persian ...
- 580. grid jurifit (a giraffe) is the Arabic will, zurific.
- 598. We naram (soft) is a corruption of the Persian parm.
- 620. अरा sord (saltpetre) is the Persian شورد.
 - the Persian , is, and not derived directly from the Sanskrit way knowners.

- 630. واحوال (condition) is a corruption of the Arabic plural احوال).
- 631. THIE bahar (spring) is the Persian ...
- منهر saphar (journey) is the Arabie سنر.
- 636. WW bdj (a hawk) is the Persian ; b.
- 647. Wat alar (seent) is a corrupt form of the Arabic he 'itr.
- 654. **الإطان absin** (generosity, henefit) is a vulgarized form of the Arabic إحسان ibsin.
- ويند band (an embankment) is the Persian بند.
- والم Balakh (the city of Balkh) is the Persian بالم الم
- 685. عبول kabûl (acceptance) is the Arabic قبول.
- 694. बहुब bahas (discussion) is a corrupted form of the Arabic كنة bahs.
- نربار darbdr (court) is the Persian دربار.
- 706. **पते** phate (victory) is a vulgar form of the Arabic فتح fath.
- 707. 實明 hukum (order) is a vulgar form of the Arabic hukm.

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TWO NOTES ON VEDIC RELIGION

In his recent treatise on The Scapegoat Sir James Frazer has made use, in support of his thesis of the fundamental character of early religion, of certain Vedic evidence. It is of interest to examine the use made of the material, in order to determine whether or not it can be regarded as valid, and whether the Vedic religion thus receives further elucidation.

The main thesis of Sir James Erazer in The Scapegoat 1 is that on the one hand it was customary to kill the human

or animal god in order to save his divine life from being weakened by the inroads of age, on the other it was customary to have a general expulsion of evils and sina once a year, and that by a combination of these two uses the dying god was employed as a scapegoat. illustrating these ideas, the author examines in detail the sacrifices of the Mexicans, which he considers as illustrating in special completeness the doctrine of deicide as a process of maintaining the life of the world, and finds in it the theory that death is a portal through which gods and men alike must pass to escape decrepitude and to attain the vigour of eternal youth. "The conception," he concludes,2 " may be said to culminate in the Brahmanical doctrine that in the daily sacrifice the body of the Creator is broken anew for the salvation of the world." This conception is more precisely developed 3 by reference to the Rgvedic* theory of the origin of the world from the dismemberment of Purusa by the gods, and to the Brahminical theory of the repetition in the ritual of the mystic sacrifice of Prajapati by which the world is continually anew created. The world is renewed by the sacrifice, and the priest who performs the sacrifice identifies himself in the act with the creator and by his act of sacrifice keeps up uninterrupted the revolution of time and matter.

The use made of the Brahminical theory of sacrifice is extremely ingenious and effective, but it remains to inquire whether it is legitimate. It must be remembered that in this theory we have no simple and naive statement of facts of ritual, but a very claiorate and artificial figment. The Purusa hymn of the Regreta is one of the latest of that collection, as inter-alia is shown by its mention of the four castes as such, while they are unknown

4 See Macdonell & Keith, Vedic Index, in 247 %.

¹ pp. 275-205.
2 p. vi. 2 pp. 410-11.
3 See Eggeling, SBE, zhii, pp. xiv. xxiv. The Nataparlan Britimana goes further in speculation then the Tailtiriya Sashiid: see my translation of the latter text, pp. cxxvi seqq.

to the collection as a whole. It is essentially one of the philosophic or speculative, not religious hymns of the Sankilā, and the speculation which it contains is not elsewhere found in the Sankilā, a fact which renders it extremely probable that it cannot claim to have been one of the generally current views of the process of creation. But the speculation which it embodies undoubtedly reappears in a much developed and improved form in the doctrine of the Brahmin schools, and in special of the Satapatha Brahmana, summarized above.

This doctrine, however, cannot be treated as representing primitive belief. The Brahmins devoted the whole of their energies to the examination of the nature of the sacrifice, and their speculative activity took a wide range and resulted in many theories.\(^1\) They thus developed the doctrine of the substitution\(^2\) of the animal or cereal offering for the human, which, they argued, was the more primitive, and, again, they enunciated the doctrine of the efficacy of the sacrifice in the maintenance of the world. Their views on these topics are purely speculative, just as are those of Sir James Frazer, and they must not be treated as anything but conjectural explanations of what the priests found prescribed in a traditional ritual, much of which they themselves did not, it is certain,\(^3\) understand.

Now if the ritual itself, which the Brahmanas explain, provided for the slaughter of a man and treated his dismemberment in the rite as the central fact of the sacrifice, then we would be tempted to see in the Brahmana explanations a clear exposition of the meaning of the sacrifice as it presented itself to the performers of the rite. It would even then not be possible to exclude the possibility that priestly theory might engender ritual,

¹ See Levi, La doctrine du sacrifice (Paris, 1898).

See e.g. Salapulha Brāhmana, 1, 2, 3, 6, seqq.; Aitareya Brāhmana, vi S.

² e.g. the case of Makha, Vedic Index, ii, 116.

JRAR 1915.

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¹ pp. 275-305.

pp. vi. 1 pp. 410-11.

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¹ See Livi, La dectrine du sucrifice (Paris, 1898).

² Sec e.g. Asiapatha Brithmana, 1, 2. 3. 6. secg.; Altareya Brithmana,

² e.g. the case of Makha, Pelis Index, it, 116. June, 1915.

and that a merifice may not be really primitive, but at any rate the coincidence of ritual and theory would deserve. careful examination. But in this ritual the speculation is based not on the slaying of a man, but on the building of a fire altar, the Agnicayana, which is formed so as to represent a bird or human shape, Prajapati. It is essentially the formation of the altar that constitutes the creation of Prajapati and the universe, of which the altar is the microcosus. This point is the more important in that the ritual does include the use of the heads of a man and four other victims, which are required to make firm the foundation of the altar. It is, indeed, natural to suggest that the use of a human head is a relic of a formal human sacrifice, even although in the ritual as it is handed down the actual slaying of a man for the purpose is not normally contemplated. But admitting that a human life was used, it was not used for the purpose of slaying a decaying deity. The explanation of its use is the much more simple practice of burying a human being in the foundations of a building to seeme a guardian of it. That practice is of immemorial antiquity and of regular occurrence in India, and its rationale is intelligible enough. But in the slaughter of the victim in these cases there is no element to show that any divine character was assigned to the victim, still less that he was regarded as a prototype of Prajapati. The head was that of some enemy slain in battle, or of some person killed by lightning or destroyed in some other manner indicating his alight value, and the real parallel to Prajapati the sucrificer, so far from offering himself up secures as the result of the sacrifice life lasting a full hundred years. There is no trace here of the conception of dying to live or of a dying god. It cannot be too clearly realized that the dismemberment of Prajapati is not his destruction.

1 flue Regeling, SBE, ally, pp vaxvus in

^{*} See Keith, JRAS. 1807, pp. 943 4; Jackson, 1906, p. 533.

Prejapati is a permanent prius, and the dismemberment is merely a change of form of what is inexhaustible. Thus the seeming parallelism of the rite to the cases of the dying god who again comes to life is purely imaginary. To the sacrificer death is not the portal to life, but the sacrifice is a means of prolonging his life indefinitely until its full term of 100 years. The human offering as a method of attaining immortality is not even suggested. The attainment of that end is due to the fire piling in the form of Prajapati, and that consists in the arrangement of diverse bricks in various shapes and orders, and the depositing of a golden man as a symbol of Prajapati. There is no evidence of this image being a substitute for a real vetim

In point of fact the conception of the dying god and his resurrection is not Vedic, for whatever cause that religion offers no real parallel to the Adonis Attis Osiris or even the Demeter Persephone religious conception 1 That a god should be actually sacrificed by men is clearly foreign to Vedic religious conceptions, and it is most improbable that the theosophic speculation of the origin of the universe from the sacrifice of Purusa is due in any way to the existence of a practice of slaying an embodiment of the god. On the contrary, it was surely one of the casiest conceptions for a body of sacrificing priests to arrive at. that the origin of the world, which their philosophy sought to trace to one source, was to be found in an action by the creator analogous to the action of sacrifice, and that the sacratice should be performed on himself followed essentially from his solitude before creation took effect. So natural an explanation must surely have preference over one which assumes the existence of a state of religious belief of which there is no other evidence in Vedic religion.

The second point in which Sir J. Frazer appeals to Vedic authority is on the question of the 12 nights

¹ Cf. Keith, JRAS, 1907, pp. 988-49.

occurring about Christmas on which in Europe licence has often been permitted. He sees in them the period intended to equate a year of lunar months (six of 29, six of 30 days = 354) to an ordinary year (365 or 366 days), and he finds that their unfixed condition as intercalary days tended to the reversal of all established morality. The days did not fit into the ordinary year, and though necessary were yet unaccountable, a theory which is a little difficult to follow, since if days were deliberately interpolated as is assumed, those who interpolated them can hardly have been ignorant of their nature. In them he finds a period of relaxation of moral rules after the winter solutice, when mock kings were allowed to reign, and this hypothesis he carries to a further point by arguing that the practice of interpolating a month every five years, which with Zimmer the finds in the Raveda, t was in large measure 4 due to the desire to eliminate the 12 days of misrule, although the 12 day reckoning would admittedly have been far more simple, convenient, and appropriate, instead of allowing 5 years to elapse before the year could be brought into order by the addition of a month

As far as India goes this ingenuity is thrown away. The 12 days found in the Rqueda's are the period when the Rbhus rested in the home of the sun-god, and the Rbhus, it is argued, are the 3 seasons, and therefore the 12 days fall at the end of the seasons, at the winter solstice. This is all pure and most improbable gnesswork, and receives no countenance from sober scholarship or common-sense. Further, the year of 354 days is totally

¹ The Scapegoat, pp. 324-5.

Altindisches Leben, pp. 265-70.

^{*} i, 16s. 45; iii, 58. 18. Op. cit. p. 343.

iv, 33. Sos Zimmer, op. cit. pp. 365-7; Hillsbrandt, Ritselfitteratur, pp. 5 seqq.

⁸⁰⁰ Oldenberg, Religion des Veda, p. 237; Macdonell, Vedic Mythology, p. 183 f. Whitney, JAOS. xvi, p. zeiv.

unknown to the Rgueda, and only appears in the Sutran! Therefore, to suppose that the period of 12 days was used as an intercalation is absolutely unjustified. Finally, the use of an intercalary month every five years is also unknown to the Reveda or to any early text. In all probability when intercalation was begun it took the form of rough attempts to secure coincidence of the lunar and solar years by the intercalation of a month here and there, and not by adding 12 days, which implies a certain accuracy of approximation to a knowledge of the lunar and solar years of 354 and 366 days respectively, of which neither is known to early India.

A. RERRIEDALE KRITH.

THE SATURNALIA AND THE MAHAVRATA

Sir J. Frazer, in an interesting discussion in The Scapegout, has argued that the Roman Saturnalia was originally a festival held in February or March, at which in primitive times in ancient Italy it was the universal practice, wherever the worship of Saturn prevailed, to choose a man who played the part and enjoyed all the traditional privileges of Saturn for a season and then died, whether by his own or another's hand, in the character of the good god who gave his life for the world. The hypothesis is interesting; if accepted it establishes an historical connexion between the Saturnalia and the modern Carnival, and links the Saturnalia with the festivals of Kronos in Greece which show some faint traces of human sacrifice.

The evidence, however, when carefully sifted, indicates that the attempt to explain the Saturnalia on the theory of the dying god is not one which can be accepted. The date is a most serious difficulty which Sir J. France's

¹ Vodic Index, il, 412. * Valic Index, il, 412. * pp. 305-12

ingenuity cannot remove. As he himself points out,1 Livy treats the date as being December as far back as 217 B.C., Macrobius 2 also does not hint that the date had ever been changed, and there is not the slightest justification for the conjecture of a change of time, an expedient to which the author has resorted on other matters with equal lack of justification.4 He argues that it is strange that the festival of the god who presides over sowing should have his feast in December instead of February or March, when agricultural operations begin in Italy, and he points out that the last day of the modern Carnival, Shrove Tuesday, was up to recent times the customary season in Central Europe for promoting the growth of the crops by means of leaps and dances. But against all these theoretic considerations must be set the simple facts of the Mahavrata of the Vedic Calendar. That rito was held at the winter solstice, i.e. in December; it was not a featival of sowing, but one intended to quicken the fertility of the earth, and one of its chief features was the dauce of the maidens hearing pitchers of water. No one would expect that a Vedic rite, duly ordered by the Brahmins, would present us with the licence of the Roman Saturnalia as recorded in the texts of the Augustan and later periods. But even in the completely formalized version of the Vedic texts there are traces of an unexpected prominence of Sudras. The maidens are dasis. female slaves, and an Arvan strives with a Sudra over a skin which is shaped to be a symbol of the sun. Arvan is, of course, victor, but the mere fact of the struggle shows the popular character of the rite, and its open and avowed fertility magic deepens the impression. That magic includes a dialogue between a Brahmacarin and

p. 343, n. 1. * xxii, 1: 19 seqq. * Saturnalia, i, 10. * See Prof. C. F. Lehmann-Haupt's criticism (cited at p. 415, p. 1) of the theory of the change in the date of the Crecifizion.

See Hillsbrandt, Ross, Forest, v. 300 seqq. ; Keith, Abikhayana

Aranyaka, pp. 72 maga.

a hetaira, a pale parallel of the licence of Augustan Rome. Nor can there be any doubt that the Saturnalia was, like the Mahāvrata, in its origin a fertility ritual, held at the winter solstice. The Carnival, on the other hand, while also intended to promote fertility, belongs to a different period, namely the rites of apring, and these rites have other characteristics than those of the winter solstice.

There is, however, one argument against this view of the equation of the Mahavrata and the Saturnalia. The Mahavrata contains no hint of the slaying of a god in the person of a human representative, a view which is very probably unknown to Vedic religion.1 Nor does the Saturnalia in its classic form show any such rite, despite the full accounts preserved in various early authors. in the accounts of the martyrdom of St. Dasius, on November 24, 303 A.D., made known by Professor Cumont. it is stated that it was the custom of the Roman soldiers at Durostorum in Lower Morsia to celebrate the Saturnalia. by choosing thirty days before the festival a young and handsome man who was clothed in royal attire, and who for the period of the feast was allowed to taste of every pleasure, but who was required to commit suicide on the altar of the god at the end of the period. From this it is deduced that the actual slaying of a representative of the god was normal in Italy and was only abolished by the advance of civilization, which left only the harmless practice alluded to in post-Augustan authors of choosing from the freemen a temporary king who could issue commands to the revellers.

Now this feature of the Saturnalia is precisely one which is not paralleled in the Mahavrata and which is in all probability not ancient. The Saturnalia as we learn of it was a festival which had long undergone modification

Keith, JRAS. 1807, pp. 900 segq: 1. Prittiethe Spakite, pp. exzurill.

July, not even in March like the Babylonian Zakmuk, with which Sir J. Frazer identifies it, or like the Jewish Purim, apparently, though not certainly, a borrowing from Zakmuk. It follows, therefore, that the elaborate argument which finds in Mordecai and Eather as opposed to Haman and Vashti a relic of a ritual of slaying the human personification of the god and his revival rests on the weakest and least plausible grounds. But in any case to argue from an Eastern rite of spring to the Italian rite of the winter solatice is wholly inconclusive. We have the sure evidence of diversity of date, and against that difference can be adduced only vague and unsubstantial conjectures of identity of substance.

A. BERRIEDALE KEITH.

MALAVA-GANA-STHITI

Dr. Thomas has said (JRAS, 1914, p. 1010) that I adhere to my original interpretation of the expression Malava-gana-sthiti. That is not at all the case. My original rendering (quoted ibid., p. 746, in my note on which he has commented) was "the tribal constitution of the Mālavas," in the sense of the event of some formal establishment of the Mālavas as a tribe." My amended translation (p. 747) is "the usage of the Mālava tribe."

That the term sthiti in the dates of A.D. 473 and 532 has the sense of 'usage, custom, practice', is shown plainly by the use of amnata, 'handed down traditionally', instead of it, in the recently discovered date of A.D. 405.

¹ See Fraser, p. 359. ² Fraser, pp. 365 seqq., 405-7.

In JRAS, 1914, p. 414, Dr. Thomas gave "the continuance [sthin] of the tribal constitution [gave] of the Malavan" as being the "substance" of my official rendering. That does not represent my rendering at all property: it was to gave sthin, not to gave, that I gave the meaning of "tribal constitution"; and I did not introduce the idea of constitution.

As regards the term gung in this expression, Dr. Thomas, without making any clear statement as to how he himself would translate it, disputes the rendering of it by 'tribe', which, by the way, has been given by others as well as by me, and says that I have not quoted anything to bear out this translation: to that he adds that the meaning 'tribe' is not, to his knowledge, given to it by any of the dictionaries, Sanskrit or European. I reply as follows. The word gang is given in Indian lexicons, with many other terms, as, primarily, a synonym of simula and samphata, of which the radical and leading idea is that of 'a gathering together, a collection '.! Some familiar instances of its use and precise meanings are, ahar-guna, 'a sum or total of days'; ari-gana, 'a host of enemies'; guna-great, 'a number of good qualities'. In the case of Jain writings and inscriptions it has been rendered by 'school' and 'section': and in the case of Buddhist writings by 'chapter, meeting, company, quorum's Obviously, it has to be translated exactly in each particular case according to the context. If I and others have erred in translating it by 'tribe', we have done so in good company: the first meanings given to it in Monier-Williams' Sanskrit Dictionary are "flock, troop, multitude, number, TRIBE, series, class". But I maintain that there has been no error, and that, when the word is found in connection with names of peoples such as Malara and Yandheya, the best rendering of it is 'tribe'; the word tribe being used, of course, in its ordinary general sense,

Amerakoia (Bombay, 1896), p. 129, verses 29, 40 (twenty-two synonymous terms): Abhidhānachintāmaņi, verse 1411 (thirty-five terms), under which the editors, Houthlingck and Rieu, have explained all these terms by the German meage, which seems to mean's 'multitude, crowd, quantity'.

^{2 &}quot;School", Jacobi, SBE, vol. 22, p. 283, note 2 (quoted by Dr. Thomas): "section", Luders, List of the Brahmt inscriptions, index, p. 215.

Oldenberg, SSB, vol. 13, pp. 175, 186; vol. 17, pp. 34, 38; vol. 20, p. 210.

MASAYA-GARA-GINITS

not in any technical meaning which a padent may sesign to it as coming from the Latin tribue or on other theoretical grounds.

Questions raised by Dr. Thomas on p. 1012, as to my views about the nature of the connection of the Malavas with the era of R.C. 58, are answered sufficiently by referring him to what I have written from time to time in this Journal. I have only to add that to state a date as "the year so-and-so according to the usage or the tradition of the Malava tribe," that is, "in accordance with the reckoning followed by the Malavas," is a quite sensible and appropriate method of dating

As regards the Sungas, their approximate period, BC 183 to 72 (Barnett, Antiquities of India pp 41, 42), follows from the statements in the Puranas that the Mauryas ruled for 137 years and then the Sungas for 112 (Pargiter, Dynasties of the Kali Age p 70) applied to BC 321 as the initial date of Chandragupta. But there is no evidence that they possessed Malwa and those parts on the contrary, the indications are that, after the time of Asoka, the western parts of Northern India were split up into small kingdoms and tribal governments and that the Sungas were only a dynasty of Behar and that neighbourhood, whose territory did not extend on the west beyond Baghēlkhand. This, however is a separate question, not bearing on the translation of the expression Mulara-gana state.

J F Fiffi

¹ Witness, in addition to numerosate existince. I the Publical inscriptions, which rocation Rajas of Adhichhatra. Ladiers. I.e., Nos. 904, 905, and see this Journal. 1914, p. 89. and i2 the Resengar inscription, which mentions the Raja Bhagabhadra. Indeed, No. 609, and see this Journal. 1999, p. 1655, and subsequent papers: the c. is on good reason for identifying Bhagabhadra with either the Bhagas ata. is the Bhadra or Bhadraka (with variants including Antaka and Anthrona) whom the Pursuan name among the susage large.

TREEGULARITIES IN THE PURANO ACCOUNT OF THE

In a note entitled "The Age of the Purinas" ! Professor Keith has first referred to a piece of evidence that I cited from Mr. V. Smith's Early History of India, and criticized certain views which I put forward regarding the Purapas in my Dynastics of the Kuli Age. This part of his note really deals with the age of the Puranas. He has further taken the opportunity to criticize certain features of the dynastic account and also to refer to some points that were discussed in last year's Journal This part of his note is really a distinct matter and has only an indirect bearing on the question of the age of the Puratas. It is impossible in a note to deal properly with the former subject and I hope to do so as well as I can on a future occasion Hence I leave that at present and consider only the second subject here, and where it is necessary to refer to last year's Journal the pages are cited within brackets.

As regards Professor Keith's criticism of my views in my book I must ask those who think my views worthy of consideration to see exactly what I said there, because it is impossible in this note to deal fully with all his remarks and to restate my arguments. Hence only the more important points can be discussed here.

Three lines occur containing the word bhavieye with inference to the kings of the Kali age, and I pointed out that it could not from the context mean "in the future", but only in the Bhavisya Purana". He disputes this, and asserts that it means "in the future" (pp. 1023-4). The simplest proof would have been to give a translation of the lines, and this he has not done. The lines, freed from the comments in which he has enveloped them, are these:

I in the Matsya and Vayu respectively—
tan sarvan kirtayisyami bhavisye kathitan nppan.
tan sarvan kirtayisyami bhavisye pathitan nppan

' JRAS , 1914, p. 1021.

* Id., p. 746.

DYNASTING OF THE HALL AND

2. In the Maleya-

tasyanvavaye vakşyami bhavişye kathitan nṛpan.

3. In the Mateyu, Vayu, and Brahmanda generally—bhavisye to prasankhyātāh purāņa-jūsih śrutarşibhih.

I invite him to give a plain and straightforward translation of these lines according to his assertion that bhavisys means "in the future"; and also to explain where these Puranas found those kings kathita or puthita; whether their general agreement in the account implies that they had a common source; if it does not, why the agreement exists; and if it does, what common source they could have had

With regard to the phrase bhavesya-juar for bhavesya-juar) udahrtah, found in the Vaya and Brahmanda, he says the Matrya answers all my reasoning (pp 1023 4) but that is just what it does not do because it avoids all comparison by using a wholly different expression equality purataments, and therefore leaves my arguments untouched.

As regards dates, his statement of the facts and arguments that I put forward does not correctly summarize what I said, for example, about the date in 458 in particular. My own statement must be referred to the seeks to explain the line naturitarian Papeaser in at Satakarnikah, found in five M888 of the Mirror by comparing it with the line about Senaps op 1025; it a comparison will show that they are not samma and to wholly ignores the fact that most copies of the Mirror say Yajhasu reigned twenty-nine years and that the line and Brahmanda say nineteen years. That when one analy purports to have been written when Lapsace, was read only nine years. Upon the question how certain numerical

Post in the Purious always require writing as far as I am awar.

2 Bo also compute Professor Macdistril a statement with Professor Keith's version of it try. 7st 3)

DYNAMPRE OF THE MALE AND

expressions should be read, his remark (p. 1025, n. 3) is pointless. I never asserted that the numerals are accurate, and Mr. V. Smith regards the statement as inaccurate, rejecting 360 even more emphatically than 163. Again, in his remarks about the Tuxtras (p. 1026) he suppresses the fact that I said the line is corrupt and merely suggested 105 or 107 years as a probable figure.

Professor Keith says (p. 1026), "Mr Pargiter lays great stress on the fact that it is incredible that the Guptas should not have been mentioned if the Malaya account was compiled in their epoch. But here we are without eogent arguments. I pointed out in my book why the argument ca silentin regarding the Guptan is incontestable In his opinion then silence in an account that professes to be historical regarding one of the greatest dynastics that reigned in India has no cogency but silence in the Rigida where it has no significance supplies conclusive historical arguments. If the silence is not cogent as regards the Ciuptas is it cogent as regards Haira? or the Mohammedan invasion ! He politely calls my suggestions a wild conjecture (p. 1025), and then offers as same s conjecture of his own which wholly disregards the curding feet that the Malaya knows nothing of the

15, 15 1914 pp. 736 739, 742 Here his remark, that I completely in sunderstand his "statement that the Vedic texts are not books of has a purpose up 1931, note), calls for notice. In the argument are a linearly to shifted his ground, started a new argument, and the zel no with misunderstanding (pp. 739, 741 2). Similarly here I queted his own words to speak for themselves. Now he mays that please mer a means "that they do not deal with history ", but this is thing es that phrase. There was no misunderstanding , he is shifting his ground. This new randering, however, does not help n n im sum it thee not affect Professor Macdonell's plain statement 1 742 3 and because it is obviously abound to buse historical arguments on the silence of tests that "do not deal with history is 74%. He ashle, "their historic context is incidental." I am not sire what them words mean. If he means that historical facts are mentioned incidentally, I assent, so far as the facts are contemporaneous; ince, where these texts speak of bygone matters, obviously they marely draw them from tradition with no genrantee of infallibility.

Guptas. He improves thereon by another conjecture, hardly consistent therewith, that the *Mateya* was reducted later still, in the fifth century (p. 1026).

Six kinds of evidence were adduced to show that the dynastic account of the Kali age was composed in Prakrit originally. He criticizes several of them partially, but it is impossible for me to discuss all the details fully here; hence, while referring to my original statement for the full presentation, I will notice those main points on which his remarks have a general bearing.

Four instances of metrical irregularities in the second pada of sloka lines were pointed out. They are of two kinds. In the first three, Nirāmitrāt tu Kņemakah, samā bhokṣyanti trimsatim, and aṣṭāvimsatir Haihayāh, the fifth syllable is long by position though it should be short: and in the fourth, Bhagawān avatariṣyati, there is an excess syllable. He disposes of them all together with the remark, "they [the metrical criteria] do not weigh if we admit, as we must, that the strict rules of metre are not applicable in these cases" (p. 1027). It is quite true that similar metrical irregularities are found elsewhere: but the two kinds are distinct and must be considered separately, and as regards the fourth instance he does not meet my argument.

The first three instances violate the diambic close of the floka line. Professor Hopkins points out "that the diambus was regarded in general as obligatory". Also, referring to the many "cases in which Sanskrit grammar is violated", he says, "the most frequent cause of such violation is the well-nigh obligatory diambus at the close of a verse"; and he gives examples to show that Sanskrit grammar was violated rather than that the role about the fifth syllable should be disregarded. Metre therefore was far more imperative than grammar. Here also such

¹ Great Spic of India, pp. 248-5.

[&]quot; Id., pp. 245-7.

violations of metre are but few. Professor Keith's explanation is therefore merely his own assertion; there is no "must" in the matter at all. Moreover, it is no real explanation; it merely shirks explanation, for the questions to be answered are these. Why in these and similar cases do words occur which infrings the well-nigh obligatory rule? And how is it that they infringe the rule in their Sanskrit forms only and that their Prakrit forms would satisfy the rule?

Next come grammatical irregularities Professor Keith refers to the line in the Bhagavata, atha Magadha-rajano bharitare codame te (p. 1028). This is good Pali. That the verb codamic governs the preceding words and the line is not Sanskrit is clearly proved by the fact that it was considered necessary to emend bhavitare to bhavino uc m various copies. He speaks of a blunder: it is not mine For the two other instances that he deals with (p. 1028) and the cases of grammatical discord (p. 1029) it is sufficient to refer to my original remarks; and here I need only notice the general comments with which he disposes of those and other irregularities: "We have to do with accounts composed in the careless Sanskrit which is characteristic of the pre-classical Sutra texts and which persists in the epic" (p. 1028), and "bad Sanskrit is a sufficient explanation of these vagaries" (p. 1029). These are no explanations; they merely shirk explanation. for it is no explanation of an irregularity to say that pregularities occur elsewhere, and that is all that his statements amount to. The question to be faced is this, Why do such irregularities occur in compositions which show that their authors could write good Sanskrit?

Professor Hopkins has suggested patois as the explanation of such and other irregularities, metrical and grammatical 1: and that points in the right direction; but it involves a further question, why should patois appear

¹ Areat Spin of India, pp. 247, 202, 200 S.

amid good Sanskrit? Patois means vernacular, and vernacular in ancient India means Prakrit. His suggestion therefore means that such irregularities are due to Prakrit; and the question becomes this, why do Prakrit influences appear in Sanskrit compositions? My explanation (confining myself here to this dynastic account) is that the verses were originally popular and in Prakrit, and when they assumed a Sanskrit garb, Prakrit forms sometimes survived, especially when metre had to be safeguarded and Sanskrit forms would have violated it; sometimes the redactor preferred ungrammatical Sanskrit forms rather than violate the metre; and sometimes correct Sanskrit forms were used with oversight of the metre. Can Professor Keith give a better explanation?

The reading cka-kṣatra instead of cka-cchatra in the. Bhāgavata is due to the influence of some copyists, because it is found in two or three only of the many copies consulted; but his attempt to explain thereby the form Sifunāka for Sifunāga in the Matsya and Vāyu (p. 1029) overlooks the patent fact that k instead of g is the almost universal reading in those books, so that by parity of reasoning g is due to the influence of copyists and not k, and his reasoning refutes itself.

As regards his remarks on the use of expletives, it is sufficient to point out that he has carefully chosen the least striking of the lines quoted and ignored the more striking. How does his argument look, in the face of these two lines?—

Svātis ca bhavitā rājā samās tv astādasaiva tu. satāni triņy asītim ca Šakā hy astādasaiva tu.

His concluding remarks about the script overlook these elementary facts of this dynastic account had been written down, see ante; two scripts were in use then Kharosthi and Brahmi; and it must have been written in one or

other of these two. If, then, errors are found which can only be explained by confusion of letters in the Kharoethi script and not in any other script, what is the natural inference?

The chief feature of the dynastic account is the great quantity of grammatical irregularities, while violations of metre are very few. Those irregularities are far more numerous here than can, I believe, be matched anywhere else within an equal quantity of verses. They have all been discussed in my book, and Professor Keith has dealt with some of them. The question, why they occur, is not to be decided by such comments as he has offered, which are no real explanations. The evidence is cumulative, and the whole has to be considered fairly. He contests my explanation. I invite him to answer these elementary questions. When was the dynastic account (not the Puranas generally) compiled? Where did the author get his material for it from? In what shape did that material exist? What did the author do with it when he composed this prophetic account?

F. E. PAROITER,

RAMANUJA AND MELUKOTE

It is well known that the great reformer Ramanuja lived for several years, owing to persecution by the Chōla king, at Mēlukōte, which is Yadugiri, Yādavagiri, or Tiru-Nārāyaṇapuram, near French Rocks, Mysore District, and that he reconstructed and consecrated the temple of Nārāyaṇa there through the aid of his disciple the Hoyasla king Vishnuvardhans. A very brief but ancient record, under the title of Jāraōddhāra-krama, has been recently discovered by me and it contains valuable information about the exact dates of some leading events, and about the actual amounts contributed by Vishnuvardhana.

MANAGUA AND MELUEOTE

recration of the temple. The record was found by me among the valuable manuscripts belonging to the Sri-Yatiraja-Matha, the abode of Rāmānuja at Mēlukōte; and the late Swāmi of the Matha was kind enough to lend it to me. Its authenticity seems to me unquestionable, inasmuch as it gives a brief account of the period from A.D. 1099 to 1242, and stops there abruptly, showing that the author must have lived about the middle of the thirteenth century A.D., and that he must have intended the record to be continued by his followers.

I give below a list of events and dates as found in this record; and I hope to publish an exact rendering of the whole record at an early date.

***	old reduce we are carry assets	Cyclic year, date, etc.	A.D
1.	Ramanuja's discovery of the	Bahudhanya,	1099
	god Nārayaņa at Mēlukōje.	Magha in 5,	
		Saturday, (Revati).	
2.	Vishouvardhana pays his	Same year, Magha	
	respects to the god.	śu 13 (Sunday).	••
9.	Vishpuvardhana's return to	Same year, Magha	
	Tonnar after sanctioning 5000 gadyanas for the re- construction of the temple.	ba 7 (Tue-day).	
		Come man Dist	
1.	Construction commenced.	Same year, Phal-	
		guna iu 18 (Friday).	
		Vrishabha lagna. (Hasta-nakshatia).	
	Construction Construction	(masta-nakenatra). Syabhanu.	1104
ь.	Construction finished.		1104
_	A	Vaisākha ha 5.	
6.	Sri-Yatiraja-Matha built for Ramanuja.	Same year.	,,
7.	Ramanuja left Melukote for Delhi to bring the pro- cessional image Salvappille or Cheluvariya-svāmi.	Vyaya, Chaitra ≤u 3	1107
8.	Return to Malukote with the image. **	Vikṛti, Āirayıya 6u 7.	1111

Cyclic year, A.D.

Rāmānuja's return to Śri- Śubhakrit, Pushya 1128
rangam, after consecrating éu 18.
the temple of Tirupati on
his way.

The total period of his stay at Mělukote or of absence from Śrirangam is here calculated as 28 years, 11 months.

 Rămănuja's successor appointed by him at the Yatirăja-Mațha, Mclukoțe.

Up to Pramathin, 1128-59 Chaitra ba 6.

11. (Next Svāmi) Nārāyaņa Jiyar. Up to Prabhava,

Up to Prabhava, 1159 to Pushya su 1. 1207

12. (Next ,,) Yatıraja Jiyar.

1207-42

 (Next ..) Yadugiri Nărăyana Jiyar.

There is nothing very improbable in the above list being correct. I leave it to experts to judge of the accuracy of the dates; but I believe that full credit is, all the same, due to the author who has so carefully preserved the traditional account. Some great calamity, owing to Muhammadan invasions, seems to have occurred at Melukote about the end of the thirteenth or the beginning of the fourteenth century; and the line of succession of the Gurus of the Śri-Yatirāja-Matha must have been interrupted for some decades. It must have been resumed in the fifteenth century, when the town was rebuilt (vide Imperial Gazetteer, vol. xvii, 1908, p. 290).

M. T. NARASIMHIENGAR.

The value of the record mentioned by Mr. Narasimhiengar can be judged when we have its text and translation before us. Meanwhile, something must be said about some of his notes on it.

When the writer of a paper such as that given above leaves the accuracy of his dates to be considered by

"experts", he certainly makes matters easy for himself. But a more satisfactory course -in fact, the only really correct one-would be that, if he himself cannot do what is necessary, he should enlist the sympathetic help of some properly qualified friend, who will fix all his dates for him before he begins to write, and will lend his own name in support of results to that extent. If that cannot be done, he should find from some standard table -(e.g., Sewell and Dikshit's Indian Calendar, table 1)- the year A.D. in which a given cyclic year or a given Saka year (current or expired, as the case may be) begins; and, for such a period as that with which we are concerned here, he should take that year A.D. as the equivalent for the first ten months of the Hindû year, placing the last two months in the next year A.D. this is not a scientific course; but it is admissible if nothing better can really be done. It is of no real use to embark on chronological discussions without first having the essential bases definitely settled on some uniform and recognizable lines.

The dates in this case, and Mr. Narasimhiengar's treatment of them, are open to remarks as follows. -

No. 1. This date may possibly have some special calendrical interest. We understand that the record gives the cyclic year Bahudhānya, Māgha Sukla 5 Saturday, with the moon in the Rēvati nakshatro. The general facts of the case show that this Bahudhanya is the one which coincided with the Chaitrādi Saka year 1020 expired, and began on 6 March, AD 1028 If we follow the system of true intercalation, according to which there was no intercalated month in this year, these details do not work out satisfactorily: Māgha sukla 5 was not a Saturday (and was not in AD, 1099), it was Thursday, 30 December, AD, 1098, on which day it ended at about 18 hrs. 29 min. after mean surrise (for Ujjain), and the moon did not enter Rēvatī until about 13 hrs. 15 min. after mean surrise on the Friday. But by the

system of mean intercalation the month Magha itself was intercalary in this year. For the first Magha the result stands as above. But in the second Magha the given tithic was a Saturday, as required: it ended at about 13 hrs. 32 min. after mean sunrise on Saturday, 29 January, a.D. 1099; and on this day the moon was in Rëvati at sunrise and up to about 1 hr. 30 min. after mean sunrise. However, whether this result really justifies a conclusion that the system of mean intercalation prevailed at Mēlukōte at the end of the eleventh century, we must hesitate to decide.

Nos. 2, 3, 4. I do not spend any time over these three dates, because, the weekdays being shown in brackets, it is not clear whether they are really given in the record, or whether they have been added by Mr. Narasimhiengar by inference from No. 1: it is enough to say that not from either point of view mentioned under that date does Phalguna sukla 13 work out to a Friday. For the rest, these three dates certainly fell in the opening months of A.D. 1099, though there are reasons for thinking that that is not the understanding on which Mr. Narasimhiengar has referred them to that year.

The remaining dates might of course be calculated (except No 6, in which there are no details beyond the cyclic year): but they cannot be tested like No. 1. They are open, however, to the following remarks:—

No 10. Pramathin, Chaitra bahula 6, certainly fell in A.D. 1159, and No. 11, Prabhava, Pausha sukla 1, certainly fell in A.D. 1207. But the other A.D. dates are wrong: thus:—

No. 5. The given day in the year Svabhanu fell in AD. 1103: not 1104.

³ He seems to have taken A.D. 1099 as the general equivalent of Bahudhanya, as a result of which these three dates and also No. 1 would belong to the early part of A.D. 1100: see what he has said about Bahudhanya on p. 153 below, and my comment on p. 154-5.

No. 6. For Syabhanu without any specified day in it the proper equivalent is A.D. 1103, or more strictly 1103-4; not 1104.

in the year Vyaya fell in year Vikriti fell in in the year Subhakrit fell in

J. F. F.

THE INITIAL AND CLOSING DATES OF THE REIGN OF THE HOYSALA KING VISHNUVARDHANA

In the volumes of the Epigraphia Carnatica and in the Mysore Gazetteer Mr. Rice invariably gives A.D. 1104-41 as the period of the reign of the Hoysala king Vishnuvardhana, also known as Bittideva and Bittiga; but in his Mysore and Coory from the Inscriptions he says (p. 99):—"In what year his reign began has not been discovered. DB 11 might have decided the question, being of his 12th year, but unfortunately no year is named. The earliest actual date that can be cited for him is 1111 in Sh. 89, but Kd. 164 represents him as ruling in 1100: this must have been in association with Ballafa, his elder brother. Accordingly, he gives A.D. 1111-41 as the dates of Vishnuvardhana in the dynastic list on p. 97 of the same book.

Initial date of the reign

I have just discovered the initial date of Vishnuvardhams's reign from a close study of the Hoysala inscriptions. The inscription Ak. 110, which mentions him as ruling at Dörasamudra during the reign of the Western Chālukya king Tribhuvanamalla, i.e. Vikramāditya VI, does not give the Šaka year, but gives the year

of the grant as 45 nega Dundubhi-sameatsara. This year Dundubhi corresponds to A.D. 1142; and the expression 45 nega cannot mean anything else than the 45th year of Vishpuvardhana's reign, for it cannot refer to the Chalukyan era that began in a.D. 1676; in that reckoning Dundubhi was the 67th year. He we come to the conclusion that Vishnuvardhans's reign actually began in 1142 - 45 = A.D. 1097. This date is confirmed by various traditional and historical records which unanimously state that Ramanuja, the great Vaishnava reformer, converted (in A.D. 1098) king Bittideva, who was ruling the Hoysala kingdom, having his residence at Tonnur (Tondanur), and that, with the king's aid. Rāmānuja discovered and consecrated the image of the god Nārāyana at Mēlukote in the year Saka 1021 (AD. 1099), corresponding to Bahudhanya.

Vishnuvardhana must have been Yuraraja for some years before a D 1097, for we find references to him in the earlier inscriptions also. He must have ruled simultaneously with his elder brother Ballala I for some years, as we may judge from the inscriptions.

Closing date of the reign

Although we cannot exactly find, at present, the closing date of Vishmuvardhana's reign, we can safely assert that he must have reigned for several years after A.D. 1141. Mr Rice has confounded one Bittidëva, a general of king Vishmuvardhana with Vishmuvardhana himself, being misled by the similarity of names, and infers (p. 101) from Cm 96 that Vishnuvardhana died in A.D. 1141, but the inscription really records the death of the general Bittidëva

The following inscriptions, all referring themselves to the reign of Vishnuvardhana, clearly prove that he must have ruled up to A.D. 1156, though his son Narasimha I

THE METALLA LINE VISITEYAPPRATA

is said in some of the inscriptions to be ruling along with him (as Yuvarāja) during this period:—

1.	Epi. Corn.,	vol.	5,	Ak.	110	of A.D.	1142
9.	**	vol.	4,	Ng.	94	91	1142
8.	**	vol.	6,	Kd.	99	99	1148
4.	**	vol.	6,	Mg.	8	**	1148
5.	**	vol.	4,	Ng.	100	**	1145
6.	99	vol.	6,	Kd.	84	**	1148
7.	**	vol.	5,	Hn.	65	19	1149
8.	**	vol.	12,	Ck.	40	••	1149
9.	•	vol.	12.	Ck.	28		1156

For an account of the general Bittideva above referred to, see Epigraphia Carnatica, vol. 5, introd. pp. 16, 17.

A detailed discussion of these points will be found in a paper on the chronology of the Hoysalas which I hope to publish shortly.

M. T. NARASIMHIENGAR.

Mr. Narasimhiengar seems to take his a.D dates from the headings of the translations in the Epigraphia Carnatica volumes. That is not a safe course the dates must be read in the texts; and then the year a D must be fixed by ascertaining whether a given Saka year is to be taken as current or as expired, and by paying attention to the further details of the month etc. For instance:—Vol. 4, trans. p. 139, does place his No. 5, Ng. 100, in "1145 A.D." But the text shows (p. 245) that the record is dated on the day of the winter solstice of the Raktakshin samuatsura, Saka 1067. A reference to any standard table—(e.g., Sewell and Dikshit's Indian Calendar, table 1)—will show that the record means Saka 1067 current. And so the given day places the record in A.D. 1144 (not 1145).

Dates taken from other sources must be treated with equal care. On p. 153 above Mr. Narasimhiengar has said "Saka 1021 (a.p. 1099), corresponding to Bahudhanya,"

A very short inquiry would have shown that this remerk could not stand. Saka 1021 expired (as most usually cited) was certainly A.D. 1099 (in the sense that the first ten months of that Saka year fell in A.D. 1099), but the cyclic year was Pramathin: Bahudhanya was Saka 1021 current, corresponding, in the sense stated above, to A.D. 1098 (not 1099).

These discrepancies do not affect Mr. Narasimhiengar's present results. But attention is drawn to them to illustrate further the point (compare p. 149 above) that anyone who aims at dealing with chronological matters, and wishes to inspire confidence in his results, must first get all his dates properly settled, so that they will stand being checked by his readers.

A remark may be added about the final date, No. 9. The record, vol. 12, Ck. 28, is dated in the Dhatu samvatura, Saka 1079 This, again, is a current Saka year and in this case the equivalent is given rightly as "1156 A.D." at trans. p. 80. The text shows (p. 136) that the record seems to have been dated on the day of the winter solstice. If so, it takes Vishnuvardhana on to quite the end of A.D. 1156.

J. F. F.

MR. MARSHALL'S TAXILA INSCRIPTION

Having now, by the courtesy of Mr. Marshall, been favoured with a copy of the new inscription, I may be allowed to add the following observations, which are partly of an apologetic character:—

1. First, I may venture to express a high appreciation of the great exactness of the reading, which leaves practically nothing to reward the accutiny of other scholars. The photograph itself is a remarkable technical achievement, being pieced together out of as many as sixteen fragments.

- 2. The reading pradistarita, for which I had proposed pratithavita, is in both instances quite certain. The form, being undoubtedly an equivalent of pratithavita = pratisthavita, must be regarded as a characteristic of the local dialect.
- 3. Inspection seems to confirm the readings U(rusi)kenv (II. 1-2), Imtaphrin (I. 2), proposed by me; in the case of (ni)rva(nas) also, for (m)a(nas), the curve in the a is favourable (Mr. Marshall, I learn, does not assent).
- 4. (Sa)dhiham(na) and a . de (in l. 5) are still obscure. We expect the inscription to end ayam deya-dharma-pariedge, which may have been wrongly copied by the (rather careless) workman.
 - 5. In pracega (l. 4) the vowel e seems to be indicated.
- 6. The important ayasa (in l. 1) appears to stand good. Whether the viyasa, which has been proposed by Dr. Fleet (October, 1914, pp. 998-9) and against which I have no prejudice (except, perhaps, on grounds of date and dislect), may possibly be read, I am unable to decide (Mr. Marahall is certain of ayasa).

F. W. THOMAS.

LA FONDATION DE GOEJE

- 1. Le conseil de la fondation n'ayant subi aucun changement depuis le mois de novembre 1913, est composé comme suit : MM. C. Snouck Hurgronje (président), H. T. Karsten, M. Th. Houtsma, T. J. de Boer et C. van Vollenhoven (secrétaire-trésorier).
- 2. Vers la fin de l'an dernier, le conseil a pris à la charge de la fondation l'édition critique du Kitâb al-Fâkhit d'al-Mufaddal par M. C. S. Storey; elle paraîtra avant peu chez l'éditeur Brill à Leiden.
- 3. Au printemps le conseil a accordé une aubvention au docteur G. Bergsträsser, de Leipzig, en vue d'une enquête sur la langue arabe parlée en Syric et en

Palestine. Un rapport succinct de ce voyage se trouve dans la ZDMG. lxviii, pp. 600-2, 1914.

- 4. Le capital de la fondation étant resté le même, le montant nominal est de 21.500 florins (43,000 francs). En outre, au mois de novembre, 1914, les rentes disponibles montaient à plus de 2,600 florins (5,200 francs).
- 5. On se permet d'attirer l'attention sur ce qu'il est encore disponible un certain nombre d'exemplaires de la reproduction de la Hamâsah d'al-Buhturt. En 1909, la fondation a fait paraître chez l'éditeur Brill à Leiden cette reproduction photographique du manuscrit de Laiden réputé unique. C'est au profit de la fondation que les exemplaires sont vendus; le prix en est de deuxeents francs. Ainsi les acheteurs contribueront à atteindre le but que se propose la fondation: de favoriser l'étude les langues orientales et de leur littérature.

Novembre, 1914.

NOTICES OF BOOKS

ASSYRIAM AND BARTLONIAN LETTERS RELOGING TO THE KOUYUNJIE COLLECTION OF THE BRITISH MUMIUM. By ROBERT FRANCIS HARPER, Ph.D., Professor of Semitic Languages and Literature at the University of Chicago. Parts XII and XIII. The University of Chicago Press; the Cambridge University Press, London and Edinburgh.

Each volume contains 116 octavo plates, with xviii and xix pages of titles, dedication (to the Rev. C. H. W. Johns and the Rev. A. H. Sayce, D.D.), preface, and indices. The texts in vol. xii number 100, and those in vol. xiii 97. Many of them are mere fragments, and only twenty-five or thirty have, wholly or in part, the names of the writers. Among the most interesting names may be mentioned Sin-tabni-usur (two documents), Sama'-gunu (probably two likewise), Bêl-ibni, Merodach-baladan, and there are also documents from the Urites and the people of Assur. The following notes will give an idea of the contents of these interesting communications:—

1216, which bears forty-seven longish lines, is in the Babylonian character, and occupies three plates. It mentions a certain Bél-ušèzib, a servant of the king, who honoured his master. As he refers to "Esarhaddon, the son of the king my lord", it would seem that this communication was addressed to Sennacherib. He apparently speaks of a plot to kill him and also the king's servants. As he refers to someone (! Esarhaddon) who would (re)build Babylon and complete É-sagila (the Temple of Belus there), this letter may belong to the period after Sennacherib's destruction of that city. The text may be a communication from a Babylonian who remained faithful to Sennacherib notwithstanding all his atrocities, but the imperfection of the record leaves this uncertain.

Another important communication is No. 1288, which is from the governors (hasanāti), the mayor (?) (aba), the heads of the city Assur, and the Assurites, small and great. It speaks of governor litar-na'id, and apparently of the destruction which he had wrought. After a reference to talents and manas of gold and silver, there is a mutilated and therefore untranslatable passage. It was with the following petition:—

"To the king our lord we say: If he deliver us to the governors, thy servants will die. We have sent 2 letters to the king our lord, but we have not seen an answer. We give our persons to death. Let the king not forsake his servants."

It would be interesting to know upon what occasion this was written.

Another interesting specimen of tablets of this class is 83-1-18, 53, one of the tablets unearthed by Hormuzd Rassam in 1882, Harper's No. 1241—

... which in the midst of ... [Peklod(') upon us . . [to the king] our lord we send, and [let him '] send a force to help us. And the Gurasimmu tribe is set [against] us. An enemy has gone or has prepared (*) (to go) against them. The authority of Assyria is remote from them. And none among the governors has gone to their aid-they have given (their) hand to the enemy. Eridu and Kullab, which are left, if they can, will stand against the enemy. All the Gurasimmu tribe has now revolted, no city there supports Assyria except Ur and Kisik, and the city of Abu-iddina. And the king our lord knows that Ur in the midst of Akkad is [faithful]. To that end we were at first perfect with our help. Pekod and Tamtim hate us, and devising evil against the house of thy gods, by killing and plundering they will put an end to us; everything falling, we shall pass into their hands. Now Tamtim, Pekod, and Gurasimmu have gathered troops against us. [Let] the king our lord send

a force to the help of the house of his gods. Thou hast given the property of the kings thy fathers to the god Sin. The hands of thine enemy thou shalt take, and the land shall [not] depart from the hands of the king, and Assyria [shall be . . .] before them. The great men of the king [shall go] or shall prepare (to go) to keep the watch. . . .

Though there is neither name of writer nor of any other personage in this inscription to help to determine the date, other texts seem to furnish the needful indications. Thus No. 1206 describes the Gurasim (= Gurasimmu) as being ruled over by a certain Balat-su, and this name implies that they were of Babylonian race. No. 1342 which also refers to them, mentions a certain Bêl-ibni, whom Ašāur-bani-āpli seems to have sent as, his representative in Babylonia. To all appearance the period was that of this Assyrian king's expedition against his brother Sawaš-šuw-ukin (Saosduchinos).

The variant writings of the name Gurasimmu are interesting 多食料 () 以 , Gurasimmu, 多食料 () 以 , Gurasimmu, 多食料 () 以 , Gurasimmu, 多食料 () 以 , Gurasimmu , No. 1244 has the combination () 以 , Company of the combination () 以 , C

All will learn of the author's death with great regret, but the remaining volumes of the series will duly appear, and form a monument to his memory.

T. G. PINCHES.

VORDERASIATISCHE BIBLIOTREK. Urkunden des altbabylonischen Zivil- und Prozesarechts, bearbeitet von M. Schorr. 8vo. Leipzig: Hinrichs, 1918.

This, a thick book of 618 pages, is the first part of the eighth section into which the series is divided. The reas 1916.

documents translated number 317, and are preceded by an introduction of lvi pages, treating of the literature of Babylonian law, and the various branches of the same, with bibliographies of the works bearing upon the texts dealt with. At the end of the work we find lists of names of persons, gods, temples, animals, countries, people, places, gates, streets, rivers, and canals. The renderings themselves are supported by lists of Semitic and Sumerian words, and an appendix gives a list of dates of contemporary rulers, in which we find, first in order, the well-known name Narâm-Sin, who appears as a contemporary of Sumu-Abum, the founder of Hammurabi's dynasty. It is needless to say that this is not regarded as the renowned son of Sargon of Agade, who reigned about 2800 B.C.

The documents translated, which belong exclusively to the period of Hammurabi's dynasty, are classed in sections under letters, and subsections under Roman numerals, in accordance with the very practical system adopted. Each section has a good description of the texts translated therein, so that the reader easily obtains an idea of their most interesting points. The scope of the work, however, precludes any extended examination of these in the present notice.

The transcriptions and translations are in parallel columns, but space is economized by giving the names of the witnesses in smaller type and in single column without translation. The body of the work is set in the type known as "English" old style of a very satisfactory clearness. In the transliterations the author shows his caution by transcribing the Sumerian phrases found in these texts from time to time syllabically, and not as connected words; their Samitic equivalents, however, are given in notes. There is no equal form.

The following specimen-text will show the system adopted:-

195 : Sipper, 80: Nimonnom, 16. Ammi-caduge.

Text: M 107 (88-5-12, 57). Trans. KU iii 75. Contents: W., T., and P. each receive I male or female slave as their share of inheritance, after the eldest brother has sworn concerning the amount of the inheritance. In addition W. kindly makes over (?) to his two brothers the property which he had obtained by his own efforts. 4 judges, 5 witnesses, and the archivist.

1 Irin amtum anum-BaSa ga-du mārī meš-ša 2 zilli
warud-lu marduk dēķīma
2 Irin wardum sillili iu irra 4 zitti ib-ni-iu marduk
5 Irin amtum la-la-bi-tum
6 zitti pa-uz-za-lum 7 mi-imma an-ni-i-im 8 zittātinu
nārīmi warud-u ul-mašši-tum

* sa warad-## marduk dékûm (?) * o-hu-su-nu 1º ina e-mu-uk ru-ma-ni-su 11 ir-su-ú-ma 12 a-na ibni-ilu marduk 12 ù pa-azza-lum ah-hi-su 1º i-na tubu-ti-su i-zu-zu

15 is-lu warad-in marduk
dekûm (?) a-hu-šu-nu 16 ana mar-ti-d 17 I warad-in
ul-mas-si-lum a-bi-šu-nu
18 i-na ni-iš ilim 18 a-na
ib-ni-in marduk 20 ù pa-azza-lum ah-hi-šu 21 ú-ub-bibu 22 ú-ul i-tu-ur-ru-ma
23 I ib-ni-in marduk ù pauz - za - lum 28 mard miwarad-in ul-mas-si-lum

1 slave-woman Anumgamil (?) with her children, is the share of Warad-Marduk, the caravanleader (?); 1 slave Silli-Irra is the share of Ibni-Marduk; 1 slave-woman Lalabitum is the share of Pazzalum. All this are the shares of Warad-Ulmaššitum's children,

What Warad-Marduk, the caravan - leader (?), their brother, has acquired by his own exertion, he has shared to Ibni-Marduk and Pazza-Ium, his brothers, in his kindness.

As Warad-Marduk, the caravan - leader (?), their brother, with regard to the property of Warad-Ulmas-situm, their father, has justified himself with his brothers, Ibni-Marduk and Passalum, by the oath of God, Ibni - Marduk and Passalum, sone of Warad-Ulmasktum, will not proceed

*u-na warad-#u marduk dktm (1) a-fi-šu-nu *ú-ul i-ra-ag-ga-mu.

** nis ik samas ik marduk ù am-mi-sa-du-ga Lugal-B **In. Pa(d). Demos against Warad-Marduk, the caravan - leader (?), their brother.

"They have sworn by Samas, Marduk, and Ammisaduga, the king.

Here come the names of the four judges: Nannar-mansum, Sin-ismeani, Ibqu-Annunitum, and Ibqu-Ili-su. Among the other witnesses may be mentioned Mar-uni-ter ("the son of the 20th day"), an Amorite, and Tamlatum, son of Ibqu-nar Idigna ("the river Tigris has carried away," "cleansed," or the like).

The impressions of the cylinder-seals (which are not mentioned in the work) give an indication of the parentage of the judges, and from them we learn that Nannar-mansum was a worshipper of the deified king Ammi-titana, whilst Ibku-Amnunitum adored the reigning king, Ammizaduga, as did also Warad-Maruduk, the eldest brother, and Mar-umi-féré. Other cylinder-impressions are from the seals of Ibni-Maruduk, the second brother: Warad- . . . (probably the name of a witness read by Schorr as Warad-étil-anna) son of Ib[gatum]-he was devotee of two gods; a certain Tagir- . . . , son of Na'id-ilu . . .; a witness whose cylinder-scal bears no name, but a dedication to a god; Tamlatum the second witness, whose device was apparently not accompanied by his name; and another, possibly a woman. The document was evidently regarded as an important one

The names of the witnesses are followed by the date, which Dr. Schorr gives as follows:—

warah ntsannim Am 30km mu ammi-za-duga lugal-e "imin-bi mah dinsir babbar lugal-a-ni-ta "id am-mi-za-du-sa nuhu-uh ni-ki. On the 30th of Nisannuta, in the year in which king Ammisaduga, by the powerful command of Samas, his lord, the canal Ammi-saduga-nuhus-nisi.

¹ These supposers read otherwise by the author.

The verb is wanting, but is easily supplied; the year was that named after the digging of the canal in question—a canal whose name conferred upon the king a glory exceeding that of the greatest conqueror ever known: "Ammi-zaduga (-saduqa) is the people's abundance" (cf. Poebel, The Bubylonian Expedition of the University of Pennsylvania, vol. vi. pt. ii, p. 104).

This specimen of the texts is one of the inscriptions preserved in the British Museum, and was first published by the German Assyriologist Bruno Meissner (M) in 1893, with several others belonging to our national collection and that of the Royal Museums of Berlin. The number of British Museum inscriptions included in the present work is about 124. Improved readings are in many cases given.

T. G. PINCHES.

THE LIFE OF MUHAMMED. By the Rev. Canon SELL, D.D. The Christian Literature Society for India. pp. xiv and 232. London, Madras, and Colombo, 1913.

To treat on so intricate a subject as the life of Mohammed and the early history of Islam in so small a compass means to give little more than the bare results of original research into the sources. As the numerous quotations from modern works show, such research seems not to have been the foremost idea in, the mind of the author. He was therefore free to produce a popular book which makes no pretensions to add much to our present knowledge on the subject. As far as is possible in a book with a religious tendency, the author has striven to judge men and matters impartially and with discretion. His relying in the main on secondary sources, however, has left little room for historical criticism. He appears to take many of the legends bearing on Mohammed's early

life and prophetship as historical, although their fanciful character has been shown again and again. In the list of works mentioned as his authorities we miss Prince Teano's gigantic Annals with their compilation of every detail that counts. The author reproduces the story of the meeting of the young Mohammed with the monk Bahira, and the anecdote connected with his name al-Amin, without offering any criticism. The discussion of the views of modern writers on Mohammed's "fits" is likewise without result. We should rather agree with the Moslim writers who "do not admit this theory of fits" (p. 31). At most they might be reduced to the effects of nervous excitement, caused by suspense, which is quite explicable. The author also upholds the story of the futra, or the supposed interval of several years between the first and subsequent revelations, but no evidence to support it exists. It has even been disproved on reliable grounds. Hijra the author still translates by "flight", which is now obsolete, because it does not agree with the real meaning of the word.

In spite of the numerous works extant on the life of Mohammed there still remains an enormous mass of detail to be elucidated. Even the broad historical facts are so mixed up with what is doubtful and entirely fictitious that the work of digging out the kernel of truth is one of great delicacy and which requires an almost unfailing discrimination. The author of our book, with his profound knowledge of the Arabic language and the literature concerned, combined with his undoubted gift as a popular writer, could be of great assistance to students by giving the greater part of his attention to the original sources. The few debatable points mentioned do not in any way detract from the merit of the book.

H. HIRSCHYELD.

EPIGRAPHIA ZEYLANICA, Vol. II, Pts. I, II. By Don MARTINO DE ZILVA WICKREMASINGHE.

The two first parts of the second volume of Wickremasinghe's interesting publication contain principally pillar inscriptions belonging to the tenth and eleventh centuries. The Kirigallawa pillar (No. 1), discovered by Mr. H. C. P. Bell in 1892 about 20 miles north-north-east of Anuradhapura, was set up by King Udaya I in the year 953 A.D. Wickremasinghe has found out in this occasion (p. 9) that the kings of the tenth century use the titles Salamevan and Siri Sang-bo alternatively. If one was known as Salamevan his successor was called Siri Sang-bo and vice versa.

Nos. 2-5 are pillar inscriptions of about the same date and the same contents. Their subject is the granting of the usual immunities to villages in the neighbourhood of Anurádhapura. The form of the letters and the style of the language in the Timbirivava inscription (No. 3) are in agreement with the Moragoda pillar of Kassapa IV (vol. i, No. 17), the first twelve lines in both being almost the same word for word.

No. 6 is a pillar inscription of Kassapa V discovered by Mr. Bell in the ruins of Mädirigiriya, 46 miles southeast of Anuradhapura. The nature of the privileges agrees in the main with other similar records of the period, but in addition to these the inscription contains rules for the management of the hospital attached to the monastery. The expression used for "hospital" is ved-hal = vaidyaçdlā, and the inmates of the hospital are called ved-hal-vassan (O·10). The other terms mentioned by Wickremasinghe on p. 26, viz. ved-hal-kāmiyan, ved-hal-dasun, ved-samdaruscan, ved-hal-badgam bim, ved-hal-bad-kudīn, do not occur in the inscription.

The order that "dead goets and fowls should be given to the hospital" (C 16) would show that suimal food was

allowed in these Buddhist institutions, but the translation of this passage is doubtful.

Velā-yul pasdenā (B 24) is translated "the five superintendents of fields" and velā-yul samdaruvan (C 12, 13) "agricultural officials". Clough's Dictionary has a word velu = land sown with grain, field or farm. It must be identical with Sanskrit velu, "garden, park" (Hemacandra, Abhidhānacintāmaņi, 1111). A different word is vel = Skt. velü, "coast" (Geiger, No. 1390).

No. 7 contains a grant of the usual immunities to a certain plot of ground belonging to Tisaram numery. In C 11, 12 we ought to read kolpāṭṭṭin instead of tolpāṭṭin and compare this with kolpāṭṭin in the Mahā-kalattaewa inscription (A.I.C., No. 110) A and C. I have translated this passage "in agreement with the Kolpatra community of priests", and stick to this translation until further notice.

The Actaviragollaeva pillar (No. 9) is the only inscription contained in this volume which has been published before by Dr. Goldschmidt in 1876 and by me in 1883 (A.I.C., No. 117) with an incomplete translation. The contents are the usual immunities granted to the village Velangama, but in the introduction King Dappula V tells us that he ransacked the Pāndya country and obtained a victory in the ninth year of his reign (1000 A.P.).

With regard to the translation I have the following remarks to make: For the term uluvidu (C3) Wickremasinghe refers us to vol. i, p. 199, n. 12. There we find the translation "basket-makers", which has no etymological foundation. But the same word occurs also in vol. i, p. 112, n. 3, and there we have the correct translation "brick-layers". Uluvudu = Pali ithikāvaddhuki (Mahāv. 222). The translation of daligattan by "bird-catchers" seems correct. In Abhidhānappadipikā, 514, the Pali jāliko is rendered by varadālvadda. Tundies (C 22) is a difficult word. Wickremasinghe vefers us again to

vol. i, p. 199, but there also he gives no translation. In Jātaka, v, p. 102, we read—

Rattimhi corā khādanti, divā khādanti tundiyā raṭṭhasmim khuḍḍarājassa bahu adhammiko jano.

By night to thieves a prey are we, to publicans by day, Lewd folks abound within the realm, when evil kings bear sway.

Most probably our tundied is the same as this tunding in the Jataka. The meaning "publicans" would suit very well.

Another translation is possible if we lay stress upon the s in tundise. Burnell in his Elements of South Indian Palaeography (London, 1878) on p. 126 mentions the kingdoms of Pandion and of Tundis. The first occurs in Periplus Maris Eryth., § 58, and in Ptolemy, vii, 1, §§ 11, 79; Pliny, vi, 105; the second in Periplus, § 54; Ptolemy, vii, 1, § 8. Now the name Paudi is frequent enough in the inscriptions of the tenth century. generally stands together with Soli (the kingdom of the Colas in Southern India), as for instance in the Timbiriwawa inscription (vol. ii, No. 3), B 22. Under the circumstances it would be quite natural to find also the kingdom of Tundis. Then the translation would run thus: "The inhabitants of Tundia shall not enter." Cf. also the Rajamāligāwa pillar inscription at Polonnaruva (vol. ii, No. 10), B 24, 25. I give both renderings of this important expression, but I confess that I prefer the first one.

The second part of vol. ii begins with the Rajamaligava and Mayilagastota pillar inscriptions of Mahinda IV. The latter of the two has been published before by Dr. Goldschmidt and by myself (A.I.C., No. 120). Wick-remasinghe accepts our statement that Mahinda IV of the Mahavanan is identical with the Siri Sang-boy Abahay of the Mihintale tablets and with the Mihindu of the

Mayilagastota inscription, and traces out a genealogical table which enables us to form an idea as to how the Ceylon kings of the tenth, eleventh, and twelfth centuries were related to one another. With regard to the translation, he deviates in several points from the one given by me in 1883. In this respect I have the following remarks to make:—

Line A 26 we ought to read vavisthā karā and translate in the manner adopted by Wickremasinghe in his note 5. Varisthā means "regulation" and occurs in the Vessagiri inscription of Mahinda IV (Epigr. Zeyl., vol. i, No. 2), line 30, and in the Paepiliyāna inscription of Parākramabāhu VI (A.I.C., No. 160). Wickremasinghe's rendering of B 3-10 is preferable to mine With regard to B 13-21, I can neither accept his translation nor do I stick to my own. The passage remains obscure.

No. 13 is a slab inscription of King Kirti Niccanka Malla at the Ruvanvali Dagoba in Anniadhapura, published before by Rhys Davids in JRAS. VII, p. 353 f, and by me in A.I.C., No. 145. In his introductory remarks (p 74) Wickremasinghe calls attention to a class of fowlers called Kambuli and mentioned in line 27. He believes that " the Kambojas have come to Ceylon as horse-dealers and that a colony of them may have settled permanently in Anuradhapura in company with the Yavanas when that city was in the zenith of its glory". That the Kambojas were known principally as horse-dealers in Ancient Iudia is proved by several passages in the Jataka. the Mahavastu, and the Indian lexicographers, to which Mr. G. K. Nariman in his interesting article in this Journal for 1912, pp. 255-7, has called attention. From line 27 of our inscription we learn that in Ceylon they were known as birthcatchers, and that Niccanka Malla.

¹ Jolly, Zeitsch. deutsch. morgent. Gen., xliv, p. 344, translaten it by "Rechtsgutzchten "."

"by bestowing on them gold and cloth and whatever kind of wealth they wished," gave security to birds.

Weber, in his reviews of James d'Alwis' introduction to Kaccayana's grammar of the Pali Janguage (Indiache Streifen, ii, 316 ff.) and of Burnell's Elements of South Indian Palarography (Indische Streifen, iii, 348 ff.), has shown that Kamboja has quite a different signification in the inscriptions of Açoka from that which it has in later Päli lexicography, as for instance Abhidhanappadipikā, 185, from where Childers takes his quotation. In Vedic literature Kamboja is the name of a nation on the north-west frontier of India, supposed to have dwelt in close proximity to the Yavanas. Later on the name was transferred to Further India in the same way as Campa, the capital of the Angas (the modern Bhagulpore), was later on a city near the mouth of the River Mekong (Barth Inscriptions sanscrites du Camboge, p. 69). The descendants of the first-mentioned Kambojas had adopted the Mussulman creed and used to trade all along the west coast of India from the Persian Gulf down to Caylon and probably further east, while the Kambojas of Further India were devout Buddhists. I think Wickremasinghe is correct in stating that the Kambojas mentioned in Niccanka Malla's inscription belonged to the former class (p 76)

The remaining portion of pt. ii contains some more inscriptions of the same king, viz. the slab inscription of the Hata-Dā-ge portico at Pollonaruva (No. 14), the Hata-Dā-ge vestibule wall inscription (No. 15), the Hata-Dā-ge inside wall inscription (No. 16). They offer no particular interest.

Before concluding this review I must make up for an omission which I committed some years ago in reviewing the fifth part of the first volume of the *Epigraphia Zeylanica*. It concerns the expression parallel in the Kiribat-vehera inscription (p. 161) and in the Iripinniyava

pillar inscription (p. 170). Wickremssinghe is perfectly correct in identifying this with purihara, "immunity." He or I might have added that this word with the same signification occurs, several times in Manu, viii, 237-9. See Bühler's translation, SBE. xxv, 248.

E. MULLER.

BERNE, November, 1914.

Tamil Studies, or, Essays on the History of the Tamil People, Language, Religion, and Literature. By M. Srinivasa Aiyangar, M.A. Madras, 1914.

The author, in his preface to this work, states that he has essayed " for the first time to put together the result of past researches, so as to present before the reader a complete bird's-eye view of Tamil culture and civilization'. For this purpose he has not only utilized his own wide and scholarly knowledge of Dravidian languages and literature, but has based his facts on the reliable evidence of epigraphic remains and inscriptions. Up to the present time fiction and fable have, to a great extent, sufficed as a groundwork on which to found an account of early Dravidian history and literature. Translations of early texts are often useless as being merely essays in so-called poetry; they soldom give the true meaning of the original, and are generally unreliable for any critical or historical purposes. M. Srinivasa Aiyangar points out that "communication of knowledge in these days is best done in prose, not poetry . . . The prose should be simple and idiomatic, free alike from pedantry and haldness". The author, therefore, while fully recognizing the work of previous scholars, such, for instance, as that of P. Sundaram Pillai in his Milestones of Tamil Literature, and that of Dr. Barnett in his Catalogue of Tamil Books in the British Museum, with its valuable introduction, may well claim

to have satisfied the crying want for a textbook of accurate information, given in clear and idiomatic English, respecting early Dravidian history and literature.

Essays on Dravidian Ethnology lead up to the fatal division of the people into the right- and left-hand castes which is traced by the author to the time of Rajaraja Chola, after his conquests in the first quarter of the eleventh century. The division arose after A.D. 1010. when the Chola monarch "marshalled his extensive armies . . into two great divisions, the one consisting of those men who had won for him victories in all his foreign campaigns, and the other composed of new soldiers from the Pandya, the Telugu, and Canarese countries, who had formerly fought against him from his enemies camp. The former, recruited chiefly from the Vedan, Nattaman, Malayaman, and Paraiya castes, he called the right-hand army (ralankar relankaran), while the latter made up of the Pallans, Pallis, Madegas, and Bedars (Canarese hunters), was called the left-hand army ". This argument for a military and political origin of the ever-perplexing division of the agricultural and artisan classes is supported by evidence from the inscription of Rajendra Chola where the "old troops of the right hand" (valunkarpparam padagal) are referred to in contradistinction to the new ones of the left hand, further. from the fact that Adirajendra Chola (A.D. 1065) imposed a poli-tax (SI. Ins., vol. iii, p. 165) on all male members of both factions.

Some suggestive facts are advanced to support the author's view that the Vatteluttu alphabet was introduced from Western Asia by Tamil merchants about the seventh or eighth century B.C., and that, although it was supplanted by the Grantha characters in or about the tenth century, it was not borrowed or adapted from the Brahmi or Asoka alphabet. His account of Dravidian philology ably supplements the work of Caldwell's

Comparative Grammar. The Academy period of literature is held to have extended from 500 a.c. to a.d. 500, and included the eight anthologies, the ten major and eighteen minor poems, as previously set forth by Seshagiri Sastri in his Essay on Tamil Literature. The Jain, Buddhist, and Brahmanic periods of early literature are extended down to a.d. 950, while from that date down to a.d. 1200 the sacred hymns and poems of Saivas and Vaishnavas, which had till then remained scattered, were collected and arranged. A detailed and lucid account of this period of literature expands the recent exposition set forth in Farquhar's Primer of Hinduism.

A chapter is specially devoted to the Āzhvārs or Vaishnava saints, of whom it is pointed out that "religious fanatics have gathered together a mass of legendary and superstitious accounts often of a conflicting and sometimes of an incredible nature".

The Tiru Vāchakam of Tiru Mānikka Vāchakar is held to have been composed about A.D. 870, while its compilation, together with the earlier Devārām hymns of Appar, Sambandhar, and Sundarar, and other poems into the eleven Tiru Murai by Nambi Āṇdar Nambi, is dated about A.D. 1025. To this date also is ascribed the compilation, with the assistance of Sri Nātha Muni, of the Vaishnava hymns into the Nālāyira Prabandham. It is a relief to find that translations of extracts from early Tamil poems are given in prose and not in poetry. Unfortunately, many of these extracts remain untranslated into English. As the work is eminently samed to be a reliable textbook for English and Indian atudents, a hope may be expressed that in a future edition these extracts may receive translation.

**HARMER SHALVERS: being a brief introduction to the history, literature, and doctrines of the Advalta-Shaiva philosophy of Kashmir, specifically called the Trika System. By J. C. Chatterj, B.A. (Cantab.), Vidyavaridhi. Fasciculus I. (The Kashmir Series of Texts and Studies, vol. ii.) 8vo. The Research Department, Kashmir State: Srinagar (Bombay printed), 1914.

Mr. Chatterji is fortunate: he has a wide general knowledge, a thorough grasp of Kashmiri Saiva literature, a happy gift of expression which enables him to convey the peculiar philosophical conceptions of Hindu thinkers in terms intelligible to the Western mind, and lastly the office of Director of the Research Department in the State of Kashmir, which puts at his disposal the last books and the ablest native intellects in that country. The present book shows that he has made good use of all these advantages.

This first volume falls into two parts, part i treating of the history and literature of the subject, part ii of its doctrines. The origins of the Saivism of Kashmir are rather obscure. Its literature, as it exists in its present form, may be classified, as Mr. Chatterji shows, under three heads ... Agama-sastra, Spanda-sastra, and Pratyabhijnasastra. The Agamic books, which tend towards Tantrism. seem to have preached a dualistic system of theology, which, taken together with the analysis of nature developed in detail in other parts of Saiva literature, shows a striking parallel to the system of the Sesvara-Sankhya. To eliminate this dualistic heresy a new school arose, of which the earliest extant product is the Siva-sutra ascribed to the god Siva, which with its commentaries -- notably the ancient witti, Bhaskara's varitiko, and Krema-raia's Vimarini-teach a thoroughgoing monistic idealism, and endeavour to interpret the older Agamas in that sense, The financia school, based on the Spanda-karikas sassibed

to Vasu-gupta (flourished early in the ninth century), with the vitti of the latter's disciple Kallata and some later commentaries, follows the general principles of the Sivasūtra, enunciating its doctrines in dogmatic form. Lastly, the Pratyabhijūā-šāstra, accepting the same idealistic doctrines, and supporting them with logical argument and active polemic, was founded by Sōmānanda (probably a disciple of Vasu-gupta) in his Siva-drsti, which was followed by Utpala's Isvara-pratyabhijūā-sūtra, with the vitti of the latter author and Abhinava-gupta's commentaries Vimaršini and Vivrti-vimaršini, etc. These three idealistic schools are often collectively designated by the term Trika.

One is tempted to speculate on the historical relation between this Trika of Kashmir and the Śaiva-siddhanta of Southern India. The two systems have obviously so much in common that they may well have originated from a common source. In e.g., their classification of the Śaktis and the modes of the phenomenal universe they are practically at one. Their chief difference seems to be in the conception of the relation between the Absolute Śiva, the individual soul, and the Māyā, the material principle Here the Trika is throughout a monistic idealism. The Southern Siddhānta is less clear: sometimes it seems to preach dualism, as when it opposes the Absolute Siva to Māyā and the individual souls, and sometimes again it asserts their fundamental unity, e.g. when it declares that

¹ The Sarva darians-unigraha applies this term not only to the doctrines here mentioned, but also to the schools based on the Siva-sutra and Snanda-kārikās.

I take this opportunity to acknowledge with gratitude Mr. Chatterji a correction on p. 11 of my mistake in JRAS. 1910, p. 719. But I regret to my that I am still not cultymost that Abbinara gapta's Parasarthanara is based upon the Vaishyava teart of that name, and that the letter is really the ancient Adhira-karikke. The whole is guinter than its part; if, as Abbinava gujus asserts, his P. is an epitone of the Abbinava karikke, it must have been shorter than the latter; but lifts autually longer than the Vaishyava P.

the worlds are the body of Siva, souls His senses, the Saktis His organ of thought (Siva-ñāna-aiddhiyār, iii, v. 7), and expresses their relation as "neither one, nor two, nor neither one nor two"—in fact, a relation which can only be conceived in mystic exaltation above the realm of reason, by the spirit of grace. These and other circumstances lead one to suspect that the basis of the Southern Siddhānta may be found in the older Agamic teachings of Kashmir, and Mr. Chatterji would greatly increase our already deep obligation to him if he would collect and publish some selections from those works.

L. D. BARNETT.

IRON IN ANCIENT INDIA. By Professor PANCHANAN NEORI, M.A., F.C.S., Government College, Rajshahi, Bengal Bulletin No. 12 of the Indian Association for the Advancement of Science. Calcutta, 1914.

The activity of the Indian Association for the Advancement of Science is a welcome feature in the rapidly changing scene of modern life in India. Professor Neogi has chosen a good subject for his contribution, and is, no doubt, well qualified to deal with it from the technical point of view. He has not, however, confined himself to that, and has ventured into discussions of Vedic philology and archeological matters where he is not so much at home.

Many Hindu authors have been engaged recently in trying to prove that their forefathers knew everything rather better than their contemporaries elsewhere. Professor Neogi seeks to show that Ancient India knew more about steel and the forging of iron than other nations, and makes out a good case. It would have been better if the author had deferred publication until he spuld have made full use of Sir Robert Hadfield's treatise

en "Similalese fron and Steel of Ancient Origin" in the Journal of the Iron and Steel Institute, 1912, and had studied more thoroughly the history of the ancient use of metals in Egypt, Babylonia, and other countries. He has merely incorporated Hadfield's analysis of Ceylon iron, and obviously is not deeply read about the archeological subjects on which he touches.

In his interpretation of Vedic passages Professor Neogi relies much on the commentary of Sayana. But that author lived in the fourteenth century, and there is little reason to trust his opinions about the exact designations of metals in Vedic times. It is unlikely that the Brahmans should have preserved any real tradition on such a subject, which concerned the technical knowledge of the artisan castes, and in all probability the guesses of Sayana are of no more value than those of his European successors The fact that Sayana assumed ayas in various passages of the Rig Veda to mean 'iron" does not prove that to be the real meaning. I am not convinced that the Rigvedic ayas must necessarily be interpreted as "iron Although some commentators and the dictionaries give 'silver" as a meaning of herringe, I doubt if that word can really have meant either "gold" or "silver" at pleasure Such an ambiguity seems to be intolerable. Perhaps hironya may have been an alloy of silver and gold. It is somewhat rash to affirm that "the use of non was common in India from 2000 ac"

It may be that in some countries the use of iron preceded that of bronze (p 3), but it is impossible to believe that people who knew non would go on using pure copper for ordinary tools. I showed some years ago (Ind. Ant., 1905, 1907) that tools of practically pure copper were once largely used in India. The Gangeris hoard from the Central Provinces comprised 424 hasmored copper implements -associated with 102 silver glates.

evidently all buried together in a box, and many other specimens of copper tools have been found in various parts of India, especially in old beds of the Ganges near Cawapore. The use of those objects must have preceded that of iron. Professor Sayce tells me that he believes that the ancients knew some method for hardening copper. It should be remembered, too, that by employing corundum powder the action of tools of comparatively soft metal could be much improved.

To return to the iron and steel. Professor Neogi clearly proves that the ancient Indians knew how to make steel by the direct process from wrought iron, and that they possessed exceptional skill in welding "blooms" of wrought iron into huge masses. The iron pillar of Mihrauli near Delhi is 23 ft. 8 in. long, with a diameter varying from 12 05 to 16 4 inches, and certainly was made in that way. I have now given up my theory that the inscription on that pillar refers to Chandragupta II, Vikramaditya (circa A.D 380 413), and am disposed to agree with M. M. Haraprasad Sastri that it refers to Chandravarman of Pushkarana, Rainutana, who lived about half a century earlier (Early History of India, 3rd ed., p. 200 n). The Dhar pillar originally more than 42 feet long, of uncertain but apparently later date, is still more massive. Those cases prove the skill of the ancient Hindus in pertictly forging extraordinary masses of iron. The beams of the Konarak temple are of very inferior manufacture

The opportunity may be taken of mentioning the success attained by the old Hindu craftsmen in casting copper on a very large scale by the cire perdue process. The colossal Buddha from Sultanganj, now in the Museum and Art Gallery, Birmingham, stands 71 feet high and dates from about a.D. 400 (History of Fine Art in India and Ceylon, ag. 118). The Chinese pilgrim tells us that at Nalanda in South Bihar there was a still more remarkable work,

a copper image of Buddha, 80 feet in height, which required a six-story pavilion to accommodate it, and was creeted about A.D. 600 by Pürnavarman, Rājā of Magadha (Beal, Life of Hiuen Teiung, p. 119; Buddhist Records of the Western World, ii, 174).

These facts suggest that Professor Neogi might do well to expand his treatise and produce a thoroughly worked out History of Metallurgy in Ancient India. His essay, as it stands, gives an impression of rather hasty production. It is not permissible to assume that the so-called "Somnath gates" stored in the Fort at Agra may be "authentic" (p. 32). They are purely Muhammedan work, and bear an Arabic inscription in the Kufic character relating to the family of Sabuktigin, for whom prayers are offered by the writer (Ann. Rep. Arch Surv. India, 1963 4, p. 17. Horovitz, Epigraphia Indo-Moslemica No 3 p. 38, Calcutta, 1912). A truthful label is now affixed to the gates, but errors die hard, and people, no doubt will insist for a long time yet in believing them to be 'authentic'

It may be noted that Professor Neogi in opposition to Professor Benoy Kumar Sarkar believes the Sukremite to be "a compilation evidently of the sixteenth century

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NOTES OF THE QUARTER

(October-December, 1914)

I. GENERAL MEETINGS OF THE ROYAL ASIATIC SOCIETY

October 13, 1914.—The Right Hon. Sir Mortimer Durand, Director, in the Chair.

Thirty-two nominations were approved for election at the next general meeting.

Dr. D. B. Spooner read a paper on "Mr. Tata's Excavations at Pataliputra".

A discussion followed, in which Mr. Vincent Smith, Professor Macdonell, Dr. Thomas, Colonel Waddell, and Dr. Hagopian took part.

November 10, 1914.—Mr. F. E. Pargiter in the Chair. The following were elected members of the Society:

Lady Boyle.

Miss M. Lowes Dickinson.

Mr. S. M. Ameen.

Mr. Jagan Nath Bhandari.

Dewan Bahadur Govindass Chathoorbhoojadass.

Babu Devakumar Ray Chaudhuri.

Mr. Sailendranath Comar.

Mr. Duncan Dunbar Dickson.

Sheikh Abdur Rahmi Baksh Ellahi.

Monivs Syed Abul Fatab.

Has Bahadur Mats Lal Ganguli.

Mr. Suffrakash Ganguli.

The Rev. Juanaratua Kavidhwaja Gunalankar.

Mr. Signar Hillelson.

Mr. K. S. Sankara Rama Iyer.

Dr. Ganganatha Jha.

Mr. A. N. Kent.

Mr. Ghaine Hyder Khan. Shefaul Mulk Hakum Abdur Rashid Khan.

Mr. Mg. Ba Ko.

Mr. Surendra Nath Kumar.

Babu Bimala Charan Law.

Mr. Anant Ram Madan.

The Rev. E. Osborn Martin.

Babu Surendranath Mitra.

Mr. Morgan Philips Price.

Moulvi Hafis Abdur Razzak.

Mr. H. L. Shuttleworth.

Dr. H. Suhrawardy.

Mr. Vatasseri Sri Velayudhan Tampi.

Moulvi Syed Abdul Wahrd.

Major P. L. E Warming.

Four nominations were approved for election at the next general meeting.

Mr. Herbert Baynes read a paper entitled "The Oriental Origin of the Conception of Law".

A discussion followed, in which Dr. Pinches and the Chairman took part.

December 8, 1914. The Right Hon Sir Mortimer Durand, Director, in the Chair

The following were elected members of the Society

Mme Marielle.

Roy. A. W. Davies.

Mr. M. P. Hajee Abdul Azeez Margar.

Mr. H. E. C. Campbell Wintle.

Two nominations were approved for election at the next general meeting.

Professor L. de la Vallée Poussin read a paper entitled "Ma définition de la grande Véhicule".

A discussion followed, in which Mr Mead, Dr. Thomas, Dr. Denison Ross, Professor Barnett M. Petrucci, and Mrs. Bode took part.

- II. PRINCIPAL CONTENTS OF ORMANDEL JOSEPHANE
- , L. JOURNAL ASSAURANT. Série XI, Tome III, No. 13.
- Pelliot (P.). Les documents chinois trouvés par la mission Koslov à Khara-Khoto.
- Weill (R.). Monuments et histoire de la période comprise entre la fin de la xii^e dynastie et la restauration thébaine.
- Contenau (G.). La cour et la maisonnée d'un patési d'Umma au temps du roi Dungi.
- Rœske (M.). Les inscriptions bouddhiques du mont Koulen.
 - II. RIVISTA DEGLI STUDI ORIENTALI. Vol. VI, Fasc. III.
- Rescher (O.) La Mo'allaqua de Antara, avec la commentaire d'Ibn el-Anbari.
- Ferrario (B) L'accento in somalo.
- Boson (G) Alcuni nomi di pietre nelle iscrizioni assirobabilonesi
- Nazari (O). Rgveda, libro i, inno 6.
- Puint (C) Di una singolare incarnazione di Samanta bhadra Bodhisattya.
- III THE MUSEUM JOURNAL (UNIVERSITY OF PENNSYLVANIA).
 Vol. V. No. 11.
- The Alexander Scott Collection of Art Objects from Tibet and Nepal
 - IV. JOURNAL OF THE STRAITS BRANCH OF THE ROYAL ASIATIC SOCIETY, No. LXVI.
- Mead (J. P.) A Romanized Version of the Hikayat Raja-Raja Pasai
 - V. JOURNAL OF THE NORTH CHINA BRANCH OF THE BOYAL ASIATIC SOCIETY. Vol. XLV. 1914.
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VI. INDIAN ANTIQUARY. Vol. XLIII, Pt. DXIVII.

Tessitori (L. P.). Notes on the Grammar of the Old Western Rājasthani.

Rangachari (V.). History of the Naik Kingdom of Madura. Vishweshwar Nath Shastri. Hathal Plates of (Paramara) Dharavarsha, Samvat, 1237.

Enthoven (R. E.). Folklore of the Konkan.

VII. PROCEEDINGS OF THE SOCIETY OF BIBLICAL-ARCHÆOLOGY. Vol. XXXVI, Pt. vi.

Sayee (A. II.). Geographical Notes on the Hittite Hieroglyphic Inscriptions.

Gwynn (Rev. R. M.). An Omen Text dealing with Houses. Wash (W. L.). Notes on some Egyptian Antiquities.

Langdon (S.). An account of the Pre-Semitic Version of the Fall of Man.

VIII. TOYO-GARDHO. Vol. IV. No. iii.

Shiratori (B. K.). Comparative Study of Korean and Ural-Altaic Languages.

Goto (B. A.). Study on the Chinese Ancient Studies carved on Tortoise-shell.

Hashimoto (B. M.)., Study of the Ancient Chinese Classic Shu-ching.

IX. T'oung Pao. Vol. XV, No. iii.

Cordier (H.). Les Correspondants de Bertin.

Mathieu (G.). Le système musical.

Lafèrre-Pontalis (P.). Wen tan.

Aurousseau (L.). A propos de l'article de Sylvain Lévi----Le Tokharien "B" langue de Koutcha.

Laufer (B.). Was Odoric of Pordenone ever in Tibet ?

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